



MINISTRY OF FINANCE

# Economic Survey

Spring 2019

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Economic Prospects



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Spring 2019

Ministry of Finance

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<b>Abstract</b> <p>In 2019, economic growth in Finland will slow down substantially after an upturn and the annual growth rate will be less than 1.5% in the coming years. In the medium term, between 2022 and 2023, the rate of growth will fall below one per cent.</p> <p>There will be further consolidation in general government finances and they will be in balance by the turn of the decade. However, of the general government sectors, central and local government will still post a deficit. General government finances will start weakening again in the early 2020s as the adjustment measures are coming to an end and economic growth will slow down.</p> <p>Finland's GDP is expected to grow by 1.7% in 2019. Growth will be sustained by domestic demand. Private consumption will continue to grow robustly. A higher employment rate and accelerating growth in earnings will sustain the growth of disposable income. Private investments will grow only slowly. There will be a particularly sharp fall in housing construction. World trade will grow more slowly in the outlook period, which will also slow down the growth of Finnish exports.</p> <p>In 2020, economic growth will slow down to 1.4%. Private consumption will be supported by rising earnings. The value of both exports and imports will increase in the outlook period, a result of growth in volumes and higher prices. In 2021, GDP growth will slow down to 1.3%.</p> <p>With a slowdown in economic growth and a rise in nominal wages, there will be a gradual weakening in the demand for labour force in 2020 and 2021. A situation where unemployment is falling to the levels experienced during the cyclical peak before the financial crisis will tighten the labour market, which in turn will create more pressures for wage increases and create labour bottlenecks in the Finnish economy.</p> <p>As a whole, inflationary pressures are expected to grow only slowly in the later years of the outlook period. The rise in earnings is expected to gradually have a broader impact on prices and consumer demand will grow steadily. Raw material prices will increase only moderately, however.</p>			
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<b>Tiivistelmä</b> <p>Vuonna 2019 talouskasvu hidastuu selvästi nousukauden jälkeen. Suomen talouden kasvu hidastuu edelleen alle 1½ prosentin vuosikasvuihin tulevina vuosina. Keskipitkällä aikavälillä vuosina 2022–2023 talouskasvu hidastuu edelleen alle yhteen prosenttiin.</p> <p>Julkinen talous vahvistuu ja tasapainottuu vuosikymmenen vaihteessa. Julkisen talouden sektoreista valtionhallinto ja paikallishallinto ovat kuitenkin edelleen alijäämäisiä. Julkinen talous alkaa jälleen heikentyä 2020-luvun alkuvuosina, kun sopeutustoimet päättyvät ja talouskasvu hidastuu.</p> <p>Vuonna 2019 Suomen BKT:n ennustetaan kasvavan 1,7 %. Kotimainen kysyntä ylläpitää kasvua. Yksityisen kulutuksen kasvu jatkuu vahvana. Käytettävissä olevien tulojen kasvua ylläpitää hyvä työllisyyden kehitys sekä kiihtyvä ansiotason nousu. Yksityisten investointien kasvu jää vaisuksi. Erityisesti uusien asuntojen rakentaminen vähenee voimakkaasti. Suomen viennin kasvua hidastaa ennustejaksolla maailmankaupan hidastuva kasvu.</p> <p>Vuonna 2020 talouskasvu hidastuu 1,4 prosenttiin. Ansiotason nousu tukee yksityisen kulutuksen kasvua. Ennustejaksolla tuonnin ja viennin arvo kasvavat sekä volyyminkasvun että hintojen nousun seurauksena. Vuonna 2021 BKT kasvu hidastuu 1,2 prosenttiin.</p> <p>Talouskasvun hidastuminen ja nimellispalkkojen nousu alkavat asteittain heikentämään työvoiman kysynnän kasvua vuosina 2020–2021. Työttömyysasteen laskeminen finanssikriisiä edeltävän suhdannehuipun lukemiin lisää työmarkkinoiden kireyttä, mikä puolestaan vahvistaa palkankorotuspaineita ja synnyttää työvoimakapeikkoja talouteen.</p> <p>Inflaatiopaineiden odotetaan kokonaisuutena kasvavan hitaasti ennustejakson seuraavina vuosina. Ansiotason nousun odotetaan vähitellen heijastuvan laajemmin hintoihin ja kulutuskysyntä kasvaa tasaisesti. Raaka-aineiden hintojen kasvu on kuitenkin maltillista.</p>			
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Den ekonomiska tillväxten avtar betydligt år 2019 efter en konjunkturuppgång. Tillväxten kommer att avta till mindre än 1½ per år i Finland under de kommande åren. Tillväxten kommer att minska ytterligare, till mindre än 1 procent, på medellång sikt under åren 2022-2023.

De offentliga finanserna stärks och balanseras vid decennieskiftet. Statsförvaltningen och lokalförvaltningen hör fortfarande till de sektorer inom den offentliga ekonomin som går med underskott. Den offentliga ekonomin börjar försvagas på nytt i början av 2020-talet då anpassningsåtgärderna upphör och tillväxten avtar.

BNP beräknas växa med 1,7 % i Finland år 2019. Tillväxten upprätthålls av inhemska efterfrågan. Den starka tillväxten inom den privata konsumtionen fortsätter. Den gynnsamma sysselsättningsutvecklingen och en tilltagande ökning av förtjänstnivån upprätthåller en ökning av de disponibla inkomsterna. De privata investeringarna ökar endast måttligt. Bygandet av nya bostäder kommer framför allt att minska kraftigt. Den finländska exporttillväxten minskar under prognosperioden till följd av att tillväxten inom världshandeln avtar.

År 2020 kommer den ekonomiska tillväxten att avta till 1,4 procent. Den ökade förtjänstnivån stöder en ökning av den privata konsumtionen. Värdet av importen och exporten ökar under prognosperioden både på grund av ökade volymer och prisstegringar. BNP-tillväxten avtar till 1,2 procent år 2021.

Den avtagande ekonomiska tillväxten och ökningen av de nominella lönerna börjar gradvis minska ökningen av efterfrågan på arbetskraft under åren 2020–2021. Arbetslöshetsgraden sjunker så småningom till samma nivå som under konjunkturtoppen före finanskrisen, vilket anstränger arbetsmarknaden, ökar trycket mot löneförhöjningar och skapar arbetskraftsflaskhalsar i ekonomin.

Det övergripande inflationstrycket förväntas öka långsamt under åren som följer prognosperioden. Höjningen av inkomstnivån förväntas så småningom avspeglas i priserna i allt högre grad och konsumtionsefterfrågan förväntas öka stadigt. Råvarupriserna ökar dock måttligt.

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## PREFACE

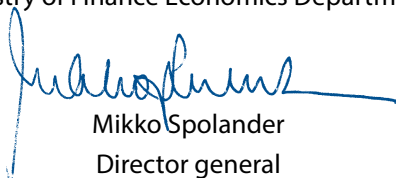
This Economic Survey offers projections of economic developments in 2019–2021. In addition to short-term prospects, it includes a medium-term economic outlook extending to 2023.

The forecast and trend projections in the survey are prepared independently by the Ministry of Finance Economics Department based on the Act on the implementation of the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union and on multi-annual budgetary frameworks (869/2012).


The forecasts are based on national accounts data for 2018 published by Statistics Finland in March 2019 and on other public statistical sources available by 21 March 2019. Both the short-term and medium-term projections take account of the decisions taken by the Government in its spending limits discussions on 28 March 2018.

Helsinki April 2019

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The source for all data on materialised developments is Statistics Finland unless otherwise indicated.

#### SYMBOLS AND CONVENTIONS USED

-	nil
0	less than half the final digit shown
..	not available
.	not pertinent
**	forecast
CPB	CPB Netherlands Bureau for Economic Policy Analysis
HWI	Hamburgisches WeltWirtschafts Institut
IMF	International Monetary Fund
MoF	Ministry of Finance

Each of the figures presented in the tables has been rounded separately.

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# Summary

## Economic outlook for 2019-2021

Economic growth in Finland will slow down substantially in 2019 after an upturn, a result of a decline in housing construction investments and a slowdown in foreign trade. In a challenging international environment, Finnish economic growth will slow down further in the coming years, to an annual rate of less than 1.5%. In the medium term, between 2022 and 2023, economic growth will fall below one per cent. In historical terms, the growth expected for the medium term is slow, which is a result of the structural factors affecting the economy.

Driven by fast economic growth, unemployment has fallen and is now close to the level of structural unemployment. This will accelerate the rise in earnings in the outlook period, which will boost household purchasing power but will also mean higher costs for companies.

General government finances will be in balance by the turn of the decade. However, of the general government sectors, central and local government will still post a deficit. General government finances will start weakening again in the early 2020s as the adjustment measures are coming to an end and economic growth is slowing down.

### **World trade will continue to grow at a slower rate**

Global economic growth is slowing down on a broad front. Especially in Europe, there has been a rapid weakening in the outlook for growth. Largely due to the problems affecting the country's car industry, Germany experienced a fall in industrial production during the last months of 2018 and export growth came to a halt.

The uncertainty arising from Brexit is dampening growth prospects in the United Kingdom. At the same time, the French economy grew faster during the last months of the year, despite political unrest. Growth in the euro area will slow down to 1.1% this year as a result of the temporary disruptions at the end of 2018. However, the rate of growth will accelerate to about 1.5% in 2020.

The United States economy is doing well but the growth rate will slow down in the next few years towards the country's actual growth potential. The growth is mainly supported by private consumption and private investments as the net export contribution is negative. Consumer confidence remains high but expectations about the future are weaker. The employment situation is very good. The outlook for foreign trade is overshadowed by the tensions with China even though there have been signs of easing of the dispute in the early months of this year.

There was a rapid slowdown in world trade at the end of 2018. Imports fell sharply, especially in emerging economies. The existing trade barriers have already slowed down growth in world trade. Growth in the trade in goods will slow down to less than 3.5% between 2019 and 2021.

### **Domestic demand supports economic growth**

Finland's GDP is expected to grow by 1.7% in 2019. The positive news received during the early months of the year suggest that the output growth is continuing. These include an increase in new orders in manufacturing, higher output expectations in companies and a continuing construction boom in growth centres. At the same time, however, there are also signs of limits to the growth because many sectors still suffer from a shortage of skilled labour and in many private business sectors, weak demand is now considered a more significant factor slowing down output growth than during the last months of 2018.

Supported by higher household disposable income, strong growth in private consumption will continue in 2019. A higher employment rate and accelerating growth in earnings will sustain the growth in disposable income. With inflation remaining at a low level, real income will also continue to grow at a rapid rate.

Private investments will grow only slowly. There will be a particularly sharp fall in new housing starts. Even though the outlook for the world economy has weakened, large Finnish industrial companies are planning more investments. An increase in

production investments will also boost companies' building construction investments.

World trade will grow more slowly in the outlook period, which will also slow down the growth of Finnish exports. Sluggish growth in the euro area is the main factor behind weaker export demand. World trade tensions and a no-deal Brexit are adding to the downside risks in the forecast.

The number of employed persons will increase by 1.2% in 2019 even though the stagnation in housing construction will slow down employment growth towards the end of the year. The employment rate for the whole of 2019 is expected to reach 72.7%.

The projected inflation rate for 2019 is 1.2%. As earnings are rising, prices of services are expected to increase more rapidly than in 2018. However, as in 2018, prices in goods will have a negative impact on inflation and as a result, baseline inflation will remain moderate. Crude oil prices have started rising again during the early months of 2019 and the upward trend is expected to continue during the outlook period. A rise in the price of electricity will also boost energy prices this year.

In 2020, economic growth will slow down to 1.4%. In 2020, wage bill growth will be supported by a more rapid rise in earnings. At the same time, growth in the number of employed persons will slow down. A slight acceleration of the inflation rate will slow down the growth in real household disposable income, which will slow down growth in private consumption.

Investments in machinery and transport equipment will grow steadily. The growth will be supported by demand, which will remain at reasonable levels in both Finland and internationally. Research and development expenditure will grow throughout the outlook period. In addition to manufacturing companies, the service sector is also expected to invest more in research and development. Central government spending on research and development will also increase.

The value of exports and imports in the outlook period will be increased by higher prices and a growth in volumes. The value of exports will grow faster than the value of imports, which will narrow the current account deficit. Finland's foreign trade surplus will reach almost two billion euros in the outlook period but the service

account deficit will persist, totalling more than two billion euros throughout the period. In overall terms, the current account will continue to show a deficit during the outlook period because there will not be any significant reduction in the deficit in factor incomes and current transfers.

In 2021, Finland's GDP will grow by 1.2%. With earnings still increasing rapidly, private consumption will also continue to rise at a fast rate. Renovation construction investments will grow steadily, at an annual rate of between one and two per cent, throughout the outlook period. Growth in civil engineering investments will be less than one per cent, which is mainly due to a fall in public sector civil engineering investments.

A slowdown in economic growth and a rise in nominal wages will gradually weaken the growth in the demand for labour force in 2020 and 2021. With unemployment falling to the levels experienced during the cyclical peak before the financial crisis, labour bottlenecks and a tighter labour market can be expected, which in turn will create more pressures for wage increases.

In 2019, earnings will increase by 2.8%. Earnings will rise by 3.3% in 2020 as a tightening labour market will accelerate wage drifts. The reinstatement of the public sector holiday bonuses will also boost earnings increases. In 2021, earnings will rise by 3.1%.

As a whole, inflationary pressures are expected to grow only slowly during the outlook period. It is expected that rising earnings will gradually have a wider impact on prices. Increases in raw material prices will, however, remain at moderate levels.

### **The ageing of the population weaken general government finances**

General government finances will be in balance by the turn of the decade. However, of the general government sectors, central and local government will still post a deficit. Only the social security funds will be in surplus.

For many years, Finland's general government finances have been weakened by the ageing of the population. As the Finnish population is ageing, working-age population will shrink, pension expenditure will grow and the need for public services will increase. In pension expenditure, the growth pressures are already being felt.



For this reason, general government finances still post a deficit even though public finances have been consolidated for many years by means of adjustment measures and Finland has enjoyed a period of steady economic growth over the past few years.

A rapid rise in age-related expenditure will continue in the 2020s as pension expenditure will grow further and the ageing of the baby boomers will increase the need for healthcare and other care services. Thus, general government finances will start weakening again as the measures consolidating public finances are coming to an end. General government debt-to-GDP ratio will gradually start rising again in the early years of the 2020s.

### **Risks to the growth outlook**

Downside risks remain substantial. A no-deal Brexit is the main risk and its biggest economic impacts would be felt in Europe. It would have significant short-term effects on the trade between the United Kingdom and the EU but the assumption is that the trade would gradually recover. The risk arising from the Italian economic policy also remains significant.

Lowering of the trade tensions is probably the most important positive risk. The USA and China have made progress in the negotiations on their bilateral trade.

An earlier-than-expected fall of housing construction investments to normal levels (about 30,000 housing units each year) is the main risk in the investment forecast. There are also considerable risks concerning the timing of the large projects. If none of the projects is launched during the outlook period, growth in investments will be extremely weak.

Continuing rapid growth in private consumption in the outlook period will highlight its role as a factor boosting GDP growth. Realisation of the risks in the external environment would weaken domestic business confidence, reduce investment and employment levels and destroy household confidence in steady economic growth. In that case, the household savings rate, which is now low, would rise rapidly, pushing private consumption and GDP to a sudden fall. Higher level of indebtedness would make it more difficult for households to keep their consumption levels unchanged during the downturn.

**Table 1. Key forecast figures**

	2018	2016	2017	2018	2019**	2020**	2021**
	EUR bn	change in volume, %					
GDP at market prices	234	2.8	2.7	2.3	1.7	1.4	1.2
Imports	92	5.4	3.8	4.2	2.7	2.5	1.9
<b>Total supply</b>	<b>326</b>	<b>3.5</b>	<b>2.9</b>	<b>2.9</b>	<b>2.0</b>	<b>1.7</b>	<b>1.4</b>
Exports	91	3.5	7.7	1.5	3.2	2.9	2.0
Consumption	178	2.1	0.9	1.4	1.3	1.3	1.2
private	125	2.2	1.5	1.4	1.8	1.6	1.6
public	53	1.8	-0.4	1.4	0.2	0.5	0.3
Investment	53	8.6	4.3	3.2	0.5	0.8	0.5
private	43	8.7	4.8	3.3	0.4	1.7	1.2
public	10	8.0	2.4	3.0	1.1	-2.9	-2.4
<b>Total demand</b>	<b>324</b>	<b>3.3</b>	<b>3.3</b>	<b>2.0</b>	<b>1.9</b>	<b>1.6</b>	<b>1.3</b>
domestic demand	233	3.2	1.8	2.2	1.3	1.0	1.0

**Table 2. Other key forecast figures**

	2016	2017	2018	2019**	2020**	2021**
GDP, EUR bn	216	224	234	242	250	258
Services, change in volume, %	1.9	1.7	1.6	1.6	1.3	1.2
Industry, change in volume, %	2.7	6.5	2.5	1.7	1.9	1.6
Labour productivity, change, %	2.1	1.8	-0.6	0.6	1.0	0.9
Employed labour force, change, %	0.5	1.0	2.7	1.2	0.4	0.3
Employment rate, %	68.7	69.6	71.7	72.7	73.2	73.6
Unemployment rate, %	8.8	8.6	7.4	6.3	6.1	6.0
Consumer price index, change, %	0.4	0.7	1.1	1.2	1.5	1.7
Index of wage and salary earnings, change, %	0.9	0.2	1.8	2.8	3.3	3.1
Current account, EUR bn	-1.6	-0.7	-4.4	-3.5	-3.4	-3.3
Current account, relative to GDP, %	-0.7	-0.3	-1.9	-1.4	-1.4	-1.3
Short-term interest rates (3-month Euribor), %	-0.3	-0.3	-0.3	-0.2	0.1	0.4
Long-term interest rates (10-year govt, bonds), %	0.4	0.5	0.7	0.8	1.4	2.0
General government expenditure, relative to GDP, %	55.9	54.2	53.1	52.6	52.2	52.0
Tax ratio, relative to GDP, %	44.0	43.3	42.5	42.3	42.3	42.1
General government net lending, relative to GDP, %	-1.7	-0.8	-0.6	-0.3	-0.0	-0.1
Central government net lending, relative to GDP, %	-2.7	-1.8	-1.2	-0.7	-0.7	-0.7
General government gross debt, relative to GDP, %	63.0	61.3	58.9	58.1	57.4	57.4
Central government debt, relative to GDP, %	47.4	47.2	44.9	44.2	43.4	43.3

## Medium-term outlook

Finland's gross domestic product grew by slightly more than two per cent in 2018. It is projected that this year, the growth will slow down to slightly below two per cent. In 2020 and 2021, the growth will continue at moderate levels, at slightly less than 1.5%. In the medium term, between 2022 and 2023, economic growth is expected to fall below one per cent.<sup>1</sup> In historical terms, the growth expected for the medium term is slow, which is a result of the structural factors affecting the economy.

The growth in labour input boosts potential output growth in the year in question and, to some extent, also in the year after that. After this, there will be a gradual reduction in labour input because working-age population continues to fall. High structural unemployment also limits the growth of labour input.

In historical terms, growth in total factor productivity has been modest in recent years and this trend will continue. The output of high-productivity sectors has declined and services have become more predominant in the overall structure of the economy. Total factor productivity growth trend is expected to be close to one per cent in the medium term, which can be compared with an average annual growth of more than two per cent in the early years of the 2000s. The predicted total factor productivity growth trend is nevertheless well above the average of the past ten years.

In addition to labour input and total factor productivity, the production conditions of the economy are also influenced by the capital stock. The low investment rate that has continued for several years has slowed down capital stock growth and has thus weakened the growth potential of the economy. Investments have picked up and the rise in the rate of investment will also increase potential output by an annual rate of about 0.5% through capital stock growth.

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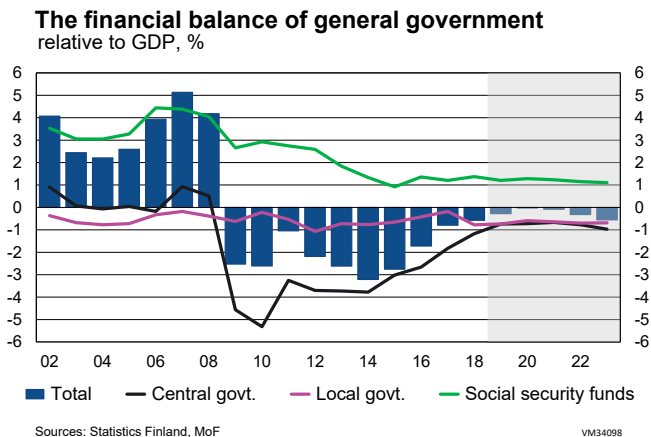
<sup>1</sup> The medium-term outlook can be estimated on the basis of potential output, which is considered to define the growth prerequisites for the economy. In its assessments of potential output, the Ministry of Finance uses the production function method jointly developed by the European Commission and EU Member States, in which potential output growth is divided into projections of potential labour input, capital and total factor productivity. Potential output and output gap are latent variables, the assessment of which involves uncertainties, especially during a strong economic cycle and under conditions of rapid changes in the production structure.

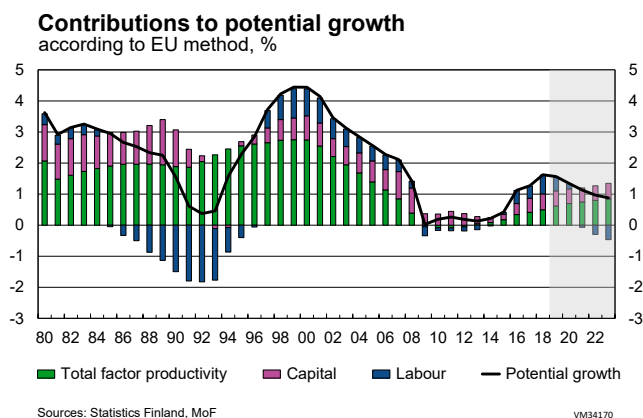
The output gap is expected to be about 0.5% positive relative to potential output in 2019. Finland's GDP will grow more or less at its potential rate in 2020 and 2021, which means that the positive output gap is no longer expected to grow significantly in the short term. In the medium term, the positive output gap is expected to start closing, as the period of high economic growth will gradually come to an end. It is, however, extremely difficult to predict the timing of the next downturn and any downturn would quickly close the positive output gap.

**Table 3. Key forecast figures for the medium term**

	2017	2018	2019**	2020**	2021**	2022**	2023**
GDP at market prices, change in volume, %	2.7	2.3	1.7	1.4	1.2	1.0	0.7
GDP, EUR bn	224	234	242	250	258	265	272
Consumer price index, change, %	0.7	1.1	1.2	1.5	1.7	1.8	1.8
Unemployment rate, %	8.6	7.4	6.3	6.1	6.0	6.1	6.3
Employment rate, %	69.6	71.7	72.7	73.2	73.6	73.5	73.3
General government net lending, relative to GDP, %	-0.8	-0.6	-0.3	-0.0	-0.1	-0.3	-0.6
Central government	-1.8	-1.2	-0.7	-0.7	-0.7	-0.8	-1.0
Local government	-0.2	-0.8	-0.7	-0.6	-0.6	-0.7	-0.7
Social security funds	1.2	1.4	1.2	1.3	1.2	1.3	1.1
Structural balance, relative to GDP, %	-0.6	-0.7	-0.7	-0.3	-0.4	-0.6	-0.8
General government gross debt, relative to GDP, %	61.3	58.9	58.1	57.4	57.4	57.7	58.3
Central government debt, relative to GDP, %	47.2	44.9	44.2	43.4	43.3	43.3	43.7
Output gap, % of potential output <sup>1</sup>	-0.3	0.4	0.5	0.5	0.6	0.6	0.4

<sup>1</sup> Estimated according the method developed jointly by the EU Commission and Member States





## Fiscal Policy

Finland's economy and public finances have improved substantially over the past few years. General government deficit has narrowed and the debt-to-GDP ratio is now on a downward path. The employment rate has risen and there has been a rapid fall in unemployment. The next Finnish government will be able to start its term in a favourable economic situation.

Even though there has been an improvement in Finland's public finances, the consolidation work must continue. A persistent structural deficit in general government finances, a debt ratio that is higher than in the past, and substantial guarantee liabilities have made Finland's public finances more sensitive to macroeconomic shocks, which often originate in the world economy. According to forecasts, there will be a gradual slowdown in economic growth in the next few years. A downturn in the coming parliamentary term cannot be ruled out either.

For many years, Finland's general government finances have been weakened by the ageing of the population. Because of an increase in age-related expenditure, Finland has been unable to balance its public finances even though adjustment measures have been taken and the economy has been growing steadily.

A rapid growth in age-related expenditure will also continue in the coming years. General government deficits will start growing again if no further measures are taken to strengthen public finances. In the 2020s, in addition to age-related expend-

iture, general government finances will also be weakened by the purchase of new fighter aircraft, a maintenance backlog and other major investment needs.

The ageing of the population has created a sustainability problem in Finland's general government finances and not enough measures have been taken to prepare for this. The sustainability gap means that in the long term, general government revenue will not be sufficient to cover expenditure. In particular, an increase in the aged population will mean higher healthcare and other care expenditure, for which the current total tax rate will be inadequate in the future. A decline in working-age population will also weaken the growth potential of the economy and thus also the funding base for public welfare services and benefits.

Finland should continue to strengthen its public finances so that it can establish buffers for future downturns and for unpleasant surprises affecting the economy. Direct adjustment measures should be introduced to consolidate general government finances so that we have time to build fiscal buffers before the next downturn. In practice, this means spending cuts or tax increases. However, there is only limited room for tax increases and spending cuts should also be targeted so that they do not weaken the potential growth.

In addition to direct adjustment measures, ensuring the sustainability of general government finances also requires structural reforms that would strengthen public finances in the long term. Sustainability of public finances, social stability and economic growth can be enhanced by more efficient public services, by increasing the employment rate and by creating a favourable environment for investments, expertise and productivity growth.

Growth in health and social services expenditure can only be slowed down and equal access to services ensured if there are productivity improvements in the provision of public services and reforms are introduced in the health and social services structure. It is important that the responsibility for providing the services can be transferred to bodies that are stronger than municipalities.

The employment rate can be raised by reducing unemployment, by encouraging people outside the workforce to join the labour market and by encouraging work-based immigration. Possible instruments include the introduction of better incentives for work by reforming the social security, taxation and service system and

measures increasing regional and occupational mobility and extending working careers. From the perspective of the sustainability of general government finances, it also important to focus on the cost-effectiveness of the measures.

Boosting growth and consolidating public finances require concrete measures that are in line with these objectives. It is important that the management of general government finances is not based on faster-than-expected economic or employment growth.

# 1 Economic outlook

## 1.1 Global economy

### Weaker outlook for the world economy

Global economic growth is slowing down on a broad front. Especially in Europe, there has been a rapid weakening in the outlook for growth. Growth in world trade also slowed down rapidly in 2018, a result of cyclical factors, trade conflicts and structural developments.

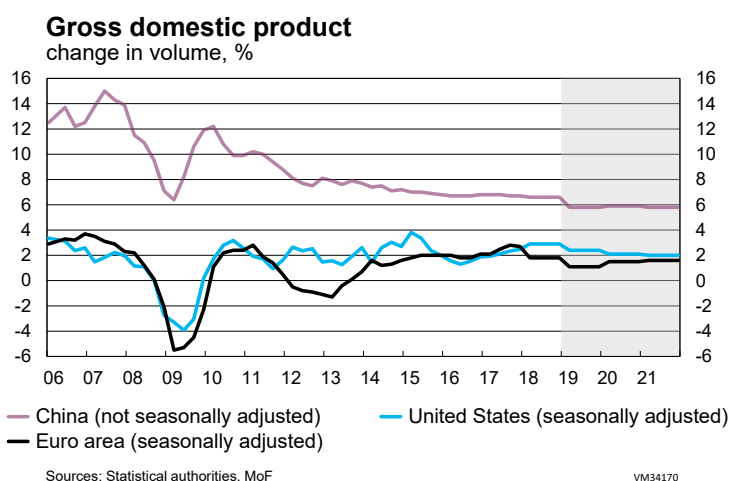
The United States economy is doing well but the growth rate will slow down in the next few years towards the country's actual growth potential. The growth is mainly supported by private consumption and private investments, as the net export contribution is negative. Consumer confidence remains high but expectations about the future are weaker. The employment situation is very good. The outlook for foreign trade is overshadowed by the tensions with China even though there have been signs of easing of the dispute in the early months of this year. The coming months will show how the conflict will develop. The Federal Reserve has announced changes to the monetary policy outlook, which have lowered expectations of increases in key interest rates.

There has been a rapid weakening in the outlook for the euro area. A particularly steep fall in industrial output in Germany was reported for the last months of 2018, which was largely due to the problems facing the country's car industry. Growth in exports came to a halt at the same time and there has also been a rapid weakening in the near-term outlook for German companies since last autumn, as indicated by the Ifo index. Despite political upheaval, the French economy picked up during the last few months of 2018. However, in France too, the purchasing managers' index fell at the end of the year. Largely driven by Germany, growth in the euro area will



slow down to 1.1% this year but the growth will pick up in 2020 and 2021 and reach about 1.5% in both years.

The uncertainty arising from Brexit is dampening growth prospects in the United Kingdom. Economic indicators have weakened and consumer confidence remains subdued despite a fairly good employment situation. Many companies are considering moving their operations to other countries. In the basic outlook in which the Brexit is carried out in accordance with the agreement between the United Kingdom and the EU, the economy will grow at a rate of slightly less than one per cent in 2019 and in the next few years.

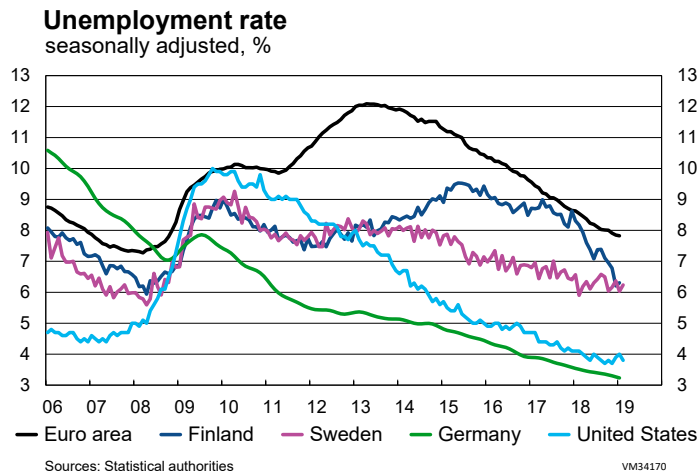


The Chinese economy grew more slowly in 2018 than at any time since 1990. There was a rapid slowdown in the country's foreign trade at the end of last year and the current account surplus, which has characterised the Chinese economy for many years, has almost completely disappeared. Retail sales of consumer products were on the decline during 2018 but they have picked up slightly since the last months of the year. Economic growth will be slightly below six per cent at the end of the outlook period.

Economic contraction during the third quarter of 2018 compared to the previous quarter and weakening indicators for the next few years are a reflection of the modest growth in the Japanese economy. Inflation has not accelerated as forecast, which means that the extremely relaxed monetary policy supporting growth is expected to continue. A rise in the sales tax planned for October 2019 is generating

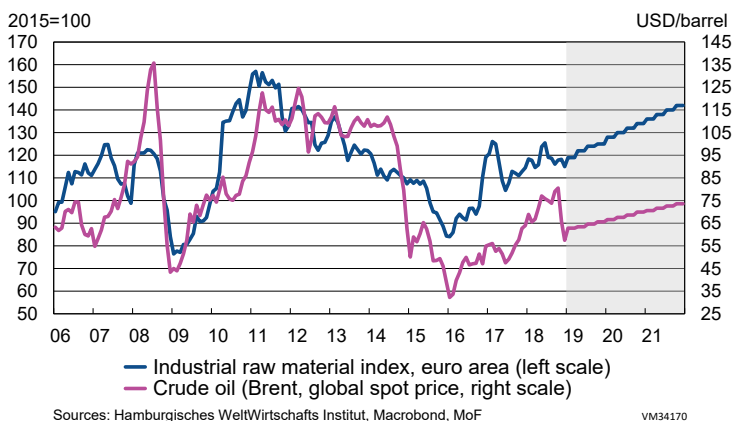
uncertainty but the Japanese government has announced measures to stimulate the economy. Growth will slow down to slightly below one per cent in the next few years.

The Russian economy grew faster than expected in 2018. According to the first estimates, the economy expanded by 2.3% year on year. Major statistical revision of the construction sector is one factor behind the faster-than-expected growth. The growth potential of the Russian economy remains modest and economic prospects are hampered by sizeable structural problems, such as low capacity utilisation rate, low labour productivity and inadequacies in business operating environment. Growth will slow down to slightly below 1.5% in the next few years.



Mainly because of the rapid growth in US production, there was a sharp fall in crude oil prices at the end of last year but the prices have increased again in 2019. The prices will probably continue to rise at a moderate rate in the coming years. There has been a rapid increase in the prices of other industrial raw materials during the first months of 2019 and a slight rise in the prices is expected during the outlook period.

## Raw materials prices



Short-term market rates are expected to rise slowly in the euro area. The expectation that the monetary policy will be gradually normalised is a factor boosting the interest rates. However, the outlook for inflation remains modest. The interest rates on government loans have declined in the United States and in the euro area and the interest rates on Italian government loans are no longer rising as rapidly as in the past.

## More uncertainty in world trade

There was a rapid slowdown in world trade during the last months of 2018 though the shutdown of the US federal government means that there are gaps in the statistics. Imports fell sharply, especially in emerging economies. Traffic in world's ports has been on a downward path since late 2017. Trade conflict measures already introduced have also slowed down growth in world trade. Growth in the trade in goods will slow down to less than 3.5% between 2019 and 2021. In addition to economic cycles and trade conflicts, world trade is also slowed down by structural factors. Automation of industrial production and robotics are reducing the need for low-cost workforce and are moving production closer to consumers.



Sources: CPB Netherlands Bureau for Economic Policy Analysis, Statistics Finland, MoF VM34170

## Risks are still skewed to the downside

Downside risks remain substantial. A no-deal Brexit is the main risk and its biggest impacts would be felt in Europe. It would have significant short-term effects on the trade between the United Kingdom and the EU but the assumption is that the trade will gradually recover. The risk arising from the Italian economic policy is still real.

Lessening of the trade tensions is probably the most important positive risk. USA and China have made progress in the negotiations on their bilateral trade.

**Table 4. Gross domestic product**

	2016	2017	2018	2019**	2020**	2021**
	change in volume, %					
World (PPP)	3.2	3.6	3.6	3.4	3.4	3.3
Euro area	1.8	2.4	1.8	1.1	1.5	1.6
EU	0.0	2.3	1.8	1.1	1.4	1.5
Germany	1.9	2.2	1.5	0.9	1.6	1.7
France	1.2	2.2	1.5	1.2	1.4	1.3
Sweden	1.3	2.1	2.2	1.4	1.8	1.8
United Kingdom	1.8	1.8	1.4	0.9	0.8	0.8
United States	1.6	2.4	2.9	2.4	2.1	2.0
Japan	1.0	1.9	0.7	0.9	0.8	0.7
China	6.7	6.8	6.6	5.8	5.9	5.8
India <sup>1</sup>	8.2	7.1	7.3	7.6	7.4	7.3
Russia	-0.2	1.6	2.3	1.4	1.3	1.2

<sup>1</sup> Fiscal year

Sources: Eurostat, statistical authorities, IMF, World Bank, MoF

**Table 5. Background assumptions**

	2016	2017	2018	2019**	2020**	2021**
World trade growth, %	1.5	5.1	3.5	3.3	3.3	3.2
USD/EUR	1.10	1.15	1.18	1.10	1.08	1.08
Industrial raw material price index, EA, € (2015=100)	96.5	114.5	118.5	123.0	131.0	139.0
Crude oil (Brent), \$/barrel	45.2	54.8	72.0	64.1	68.1	72.1
3-month Euribor, %	-0.3	-0.3	-0.3	-0.2	0.1	0.4
Government bonds (10-year), %	0.4	0.5	0.7	0.8	1.4	2.0
Export market share (2010=100) <sup>1</sup>	90.0	95.0	93.0	93.0	92.0	91.0
Import prices, %	-2.2	3.4	3.5	2.5	2.3	1.8

<sup>1</sup> Ratio of export growth to world trade growth

Sources: Statistical authorities, CPB, HWWI, Reuters, MoF

## 1.2 Foreign trade

World trade will grow more slowly in the outlook period, which will also slow down the growth of Finnish exports. Growth in export demand is overshadowed by a more moderate economic growth in the euro area; the outlook for the key export markets has weakened. Uncertain prospects for world trade and a no-deal Brexit are adding to the downside risks in the forecast.

### 1.2.1 Exports and imports

In 2018, the volume of Finnish exports grew by 1.5% and the volume of imports by 4.2%. Exports and imports of services grew at a faster rate than exports and imports of goods. In 2019, the volume of exports will grow by 3.2% and the volume of imports by 2.7%. After that, the foreign trade will grow at a more moderate rate and the growth rate will slow down towards the end of the outlook period.

The outlook for 2019 in the euro area in general and in Germany in particular has weakened, which will also be reflected in Finnish exports. Europe accounts for a large proportion of Finland's exports, which means that the demand for Finnish exports will grow more slowly than world trade. In fact, deliveries of ships will be the main factor behind export growth in 2019. Because of faster growth in the euro area, the export outlook for 2020 and 2021 is more favourable even though world trade will grow at a slow rate.

However, the prospects for Finnish export industries will not weaken significantly during the early part of the outlook period. A number of technology industry and other sectors reported more orders during the last months of 2018. The outlook for the forest industry is also positive. Issues affecting the functioning of the international trade system (such as the trade tensions between major economies) have been creating export uncertainties. At the same time, increases in unit labour costs may have a negative impact on exports at the end of the outlook period if the cost levels in Finland's competitors rise more slowly than in Finland. Service exports will also continue to increase at a steady rate, even though the rate of growth will slow down compared to 2018.

As in exports, the services were the main factor behind import growth in 2018. Domestic consumer demand will boost imports during the outlook period. A faster growth in investments in 2020 will also be reflected in imports.

**Table 6. Foreign trade**

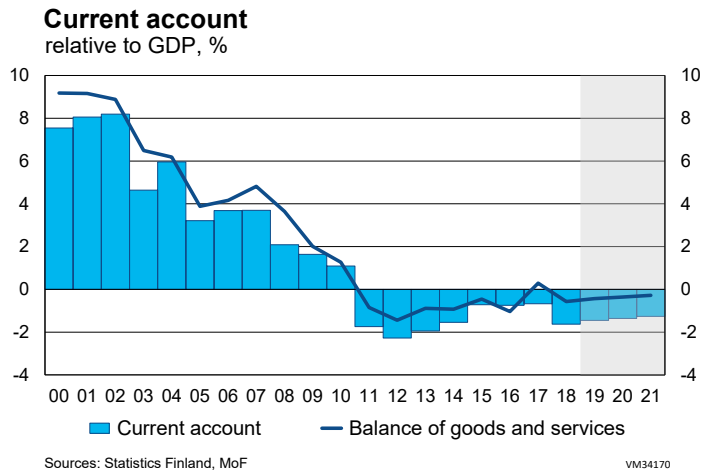
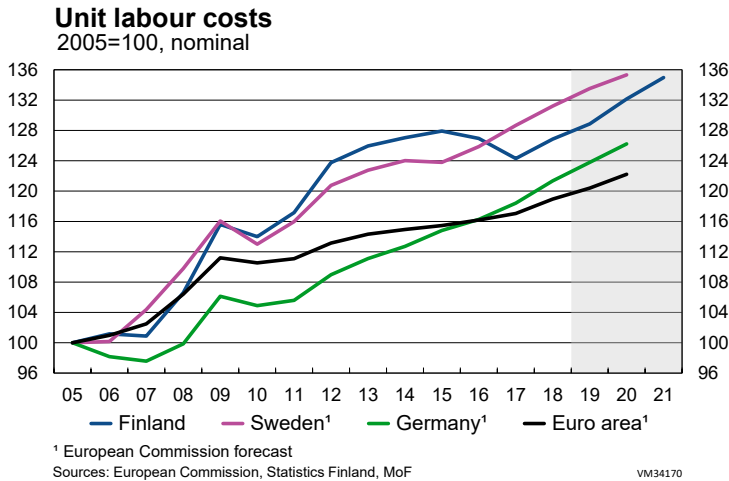
	2016	2017	2018	2019**	2020**	2021**
	change in volume, %					
Exports of goods and services	3.5	7.7	1.5	3.2	2.9	2.0
Imports of goods and services	5.4	3.8	4.2	2.7	2.5	1.9
	change in price, %					
Exports of goods and services	-1.9	3.3	4.0	2.3	2.1	1.9
Imports of goods and services	-2.2	3.4	3.5	2.5	2.3	1.8

## 1.2.2 Prices and current account

Boosted by rising oil prices, import prices increased by 3.5% in 2018. Export prices increased more rapidly than import prices, by 4.0%. Rises in the prices of oil and industrial raw materials will boost import prices during the outlook period but the increases will be more moderate than in 2018. Rises in the prices of forest industry raw materials will also boost export prices.

The value of both exports and imports will rise during the outlook period, a result of a growth in volumes and higher prices. The value of exports will grow faster than the value of imports, which will narrow the current account deficit. Finland's foreign trade surplus will reach EUR 1.5 billion in the outlook period but the service account

deficit will persist, amounting to more than two billion euros throughout the period. Finland will continue to post a current account deficit because there will not be any significant reduction in the deficit of factor incomes and current transfers.



**Table 7. Current account**

	2016	2017	2018	2019**	2020**	2021**
	EUR bn					
Balance of goods and services	-2.2	0.7	-1.3	-1.0	-0.9	-0.7
Factor incomes and income transfers, net	0.6	-1.4	-3.0	-2.5	-2.5	-2.5
Current account	-1.6	-0.7	-4.4	-3.5	-3.4	-3.3
Current account, relative to GDP, %	-0.7	-0.3	-1.9	-1.4	-1.4	-1.3

## 1.3 Domestic demand

### 1.3.1 Private consumption

#### **Economic growth will be sustained by household consumption**

Supported by higher household disposable income, strong growth in private consumption will continue in 2019. A higher employment rate and accelerating growth in earnings will sustain the growth of households' disposable income. The nominal wage bill will grow by 4%. With inflation remaining slow, real income will also continue to grow at a rapid rate.

An increase in household disposable income is also supported by a growth in social current transfers as there will again be a substantial increase in pension income with average annual growth more than three per cent. At the same time, however, a decrease in unemployment expenditure will slow down the growth in current transfers.

In 2020, growth in the wage bill will be sustained by a more rapid increase in earnings as the employment rate is no longer rising at the same pace as in 2019. There will not be any significant slowdown in wage bill growth and household disposable income will continue to grow at a rapid rate. Reinstatement of the public sector holiday bonuses in 2020 will temporarily accelerate the growth in earnings. However, a slight acceleration of the inflation rate will slow down the growth in real household disposable income, which will slow down growth in private consumption.

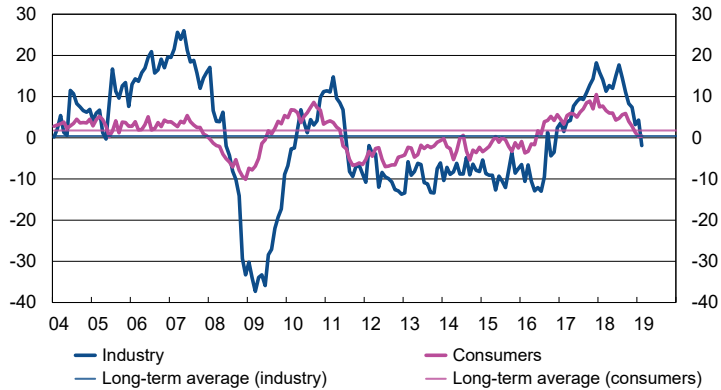
Earnings will continue to grow at a rapid rate in 2021. However, there will be a slight slowdown in wage bill growth as the employment rate is no longer growing as rapidly as in 2020. This will also slow down the growth in household disposable income. However, there will not be any slowdown in the growth of private consumption.

There was no further decline in household savings rate in 2018. The savings rate will rise during the outlook period because consumption is expected to grow more slowly than income. Supported by low interest rates and a high employment rate, household debt relative to disposable income will continue to increase. The rate of growth will slow down as the impact of the factors boosting the trend will weaken.



## Industry and consumer confidence

balance, seasonally adjusted

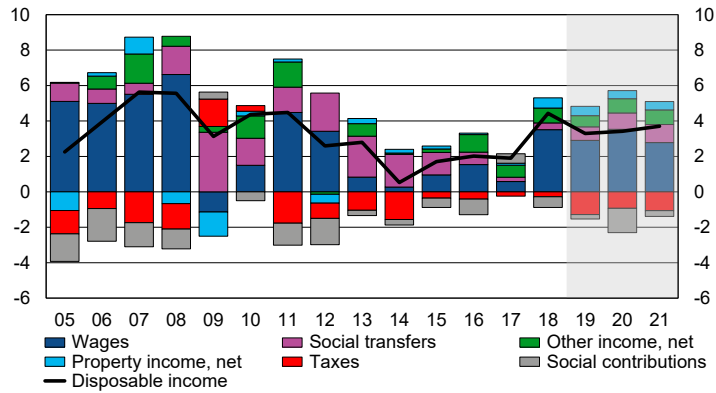


Source: European Commission

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## Households' disposable income

change and growth impact, %

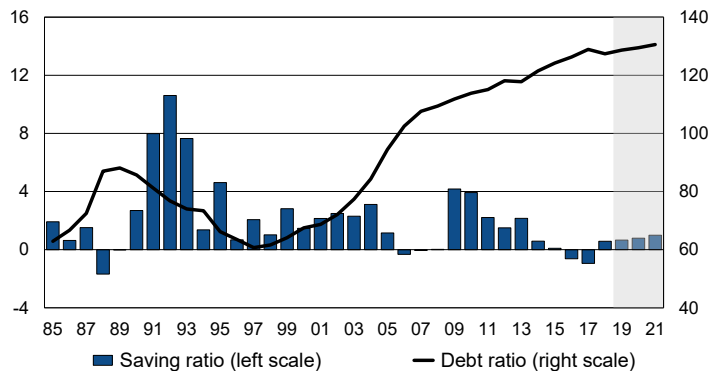


Sources: Statistics Finland, MoF

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## Household savings and debt

% of disposable income



Sources: Statistics Finland, MoF

VM34170

### 1.3.2 Public consumption

The largest items in public consumption expenditure are personnel expenses, and goods and services purchased. Local government consumption accounts for about two thirds and central government for almost one third of public consumption, while consumption by social security funds makes up the remainder. Public consumption expenditure increased last year and the rise in local government consumption expenditure was particularly rapid. The growth in the price of public consumption was boosted by pay rises and the one-off performance item paid in January 2019, which had already been entered in the books on an accrual basis for 2018.

Public consumption expenditure will continue to grow throughout the outlook period. The expenditure adjustment measures introduced by the Government of Prime Minister Juha Sipilä will no longer slow down the growth and the need for services will continue to increase as the population is ageing. The price of public consumption will be boosted this year by already agreed pay rises and the expiry of the holiday bonus cuts. Pressures to raise wages will become stronger as the unemployment rate is approaching the level of structural unemployment. The assumption is that this will accelerate the growth in earnings, which will also boost the price of consumption.

**Table 8. Consumption**

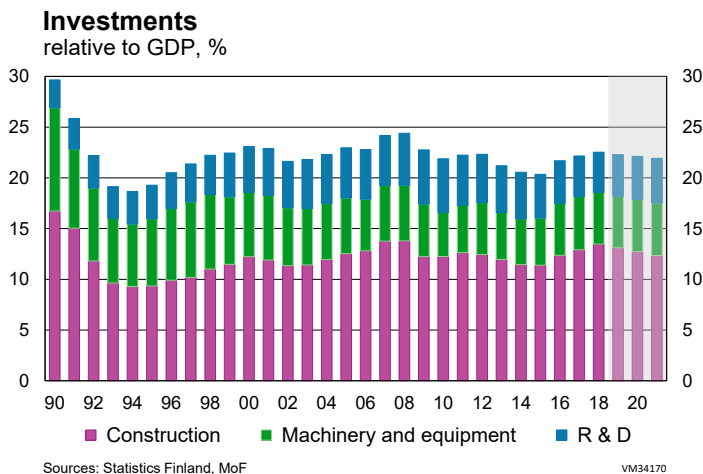
	2018	2016	2017	2018	2019**	2020**	2021**
	share, %	change in volume, %					
Private consumption	100.0	2.2	1.5	1.4	1.8	1.6	1.6
Households	95.4	2.2	1.5	1.7	1.8	1.7	1.7
Durables	8.0	5.3	3.7	4.9	1.6	2.1	1.4
Semi-durables	7.7	1.4	2.7	3.1	1.9	2.0	1.8
Non-durable goods	25.5	1.2	-0.2	-0.3	-0.2	1.3	1.2
Services	54.3	2.1	2.0	2.5	2.8	1.6	1.8
Consumption by non-profit institutions	4.4	2.8	0.6	-3.9	1.5	0.5	0.5
Public consumption	100.0	1.8	-0.4	1.4	0.2	0.5	0.3
<b>Total</b>		<b>2.1</b>	<b>0.9</b>	<b>1.4</b>	<b>1.3</b>	<b>1.3</b>	<b>1.2</b>
Individual consumption expenditure in general government		0.9	0.5	2.0	0.4	0.4	0.4
Total individual consumption expenditure		1.9	1.2	1.5	1.1	1.4	1.5
Households' disposable income		2.0	1.9	4.4	3.3	3.4	3.7
Private consumption deflator		0.4	0.6	1.3	1.4	1.6	1.8
Households' real disposable income		1.6	1.3	3.1	1.9	1.8	1.9
		%					
Consumption as proportion of GDP (at current prices)		78.9	77.3	76.2	75.9	75.9	76.1
Household savings ratio		-0.6	-0.9	0.6	0.7	0.8	1.0
Household debt ratio <sup>1</sup>		126.3	128.9	127.4	128.6	129.5	130.6

<sup>1</sup> Household debt at end-year in relation to disposable income.

### 1.3.3 Private investment

#### Aggregate investments remain muted, but production investments grow

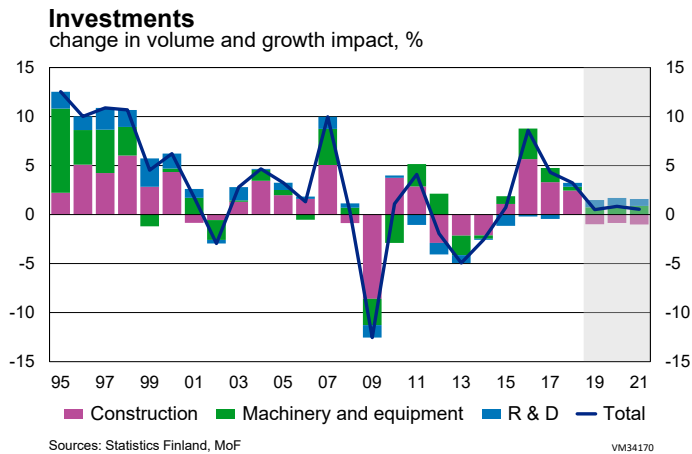
Private investments will grow only slowly in the coming years. There will be a particularly sharp fall in new housing starts. Even though the outlook for the world economy has weakened, large Finnish industrial companies are planning more investments. At the same time, however, small and medium-sized companies expect the value of their investments to decline. A number of large projects have also reached the planning stage in Finland, especially in the forest industry. Some of projects have made progress, while others have been postponed. It is assumed in the forecast that a quarter of large projects would be launched during the outlook period. On average, private investments will grow at a rate of 1.1% during the outlook period. Because of a slow growth path in private investments, they will only account for slightly more than 18% of GDP.



In 2018, private investments grew by 3.3%. The quarterly figures published in November 2018 were revised upwards by about EUR 400 million and especially the investments in machinery and equipment grew significantly faster than indicated by the preliminary figures. For the second consecutive year, new housing starts were at a record level in 2018. They totalled almost 46,000, which was more than at any time since 1990.

Construction investments will decline throughout the outlook period and the fall in housing construction investments will be substantial during each year of the period. However, new housing starts are expected to fall only gradually even though

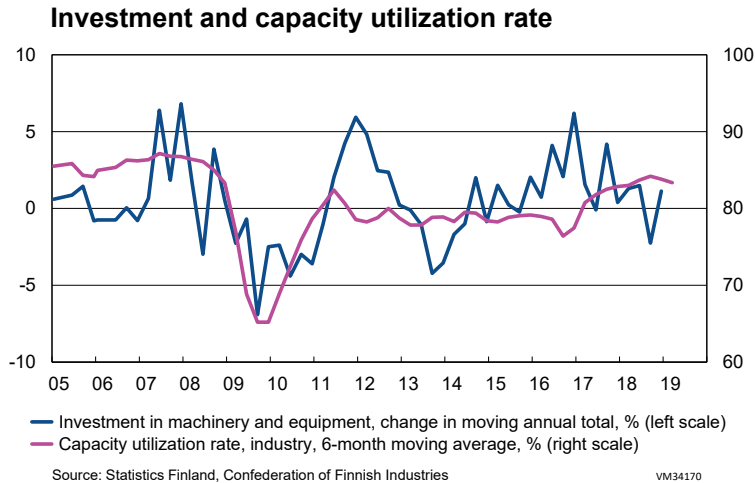
the annual decline will amount to several thousand. Boosted by a rise in production investments, other building construction investments will grow, however. The number of permits issued also indicates that investments in industrial construction are on the rise. There will be further growth in the investments in public service buildings, such as schools and hospitals. Renovation construction investments will grow steadily, at an annual rate of between one and two per cent, throughout the outlook period. Growth in civil engineering investments will be less than one per cent throughout the outlook period, mainly due to a fall in public-sector civil engineering construction.



Investments in machinery and transport equipment will grow steadily throughout the outlook period. The growth will be supported by demand, which will remain at reasonable levels in both Finland and internationally. Manufacturing companies are planning to increase fixed investments by almost six per cent in 2019, while in the energy sector, the increase may be more than ten per cent. These figures are taken from the investment survey published by the Confederation of Finnish Industries (EK) in January 2019. The assumption that one major project will be started is the main reason why steady growth is also expected for the last years of the outlook period.

Research and development expenditure will also grow throughout the outlook period. According to the EK survey referred to above, manufacturing companies will increase their research and development expenditure by 3% in 2019. Service-sector companies are also expected to increase their research and development inputs. Government R&D funding will also grow in 2019.

Earlier-than-expected return of housing construction investments to normal levels (about 30,000 housing units each year) is the main risk in the investment forecast. There are also considerable risks concerning the timing of the large projects. If none of the projects is launched during the outlook period, growth in investments will be extremely weak.



**Table 9. Fixed investment by type of capital asset**

	2018	2016	2017	2018	2019**	2020**	2021**
	share, %	change in volume, %					
Buildings	50.3	10.1	6.6	4.9	-2.0	-1.9	-2.1
Residential buildings	30.3	10.7	6.5	5.4	-3.9	-5.0	-4.5
Non-residential buildings	20.0	9.4	6.8	4.3	1.0	2.6	1.0
Civil engineering construction	9.5	9.9	1.9	0.5	0.0	0.9	0.2
Machinery and equipment	22.6	13.7	6.1	1.6	3.3	4.1	3.8
R&D-investments <sup>1</sup>	17.6	-0.9	-2.3	2.2	4.2	4.1	3.7
<b>Total</b>	<b>100.0</b>	<b>8.6</b>	<b>4.3</b>	<b>3.2</b>	<b>0.5</b>	<b>0.8</b>	<b>0.5</b>
Private	81.5	8.7	4.8	3.3	0.4	1.7	1.2
Public	18.5	8.0	2.4	3.0	1.1	-2.9	-2.4
		%					
Investment to GDP ratio (at current prices)							
Fixed investment		22.0	22.3	22.6	22.3	22.2	22.0
Private		17.8	18.2	18.4	18.1	18.2	18.2
Public		4.1	4.1	4.2	4.1	4.0	3.8

<sup>1</sup>Includes cultivated assets and intellectual property products

### 1.3.4 Public investment

Last year, public investments accounted for 4.2% of GDP, which was slightly above the long-term average. Even though the investment potential is limited by general government deficit, the investments are expected to remain at a reasonable level during the outlook period. Almost 30% of the public investments are civil engineering investments, and other building investments account for a same proportion of the total. Research and development investments account for slightly more than 25% and machinery and equipment investments for slightly over 10% of the total.

The proportion of central government investments of all public investments has declined from 58% in the early years of the 2000s to 45%, whereas the proportion of local government investments has increased from 41% to about 55% during the same period. The end of funding for the Government's key projects and for the upgrading of basic transport infrastructure last year will reduce the level of central government investments and put public-sector investments as a whole on a downward trend. Only a small number of new transport infrastructure projects will be started during the outlook period but central government research and development funding is on the increase. There will be further increases in local government investment expenditure this year after which the investments will remain at a high level. Maintenance of the existing local government building stock will also require sizeable renovation construction investments in the future. Furthermore, the construction of schools and hospitals will continue and the infrastructure investments in growth centres will also remain at a high level.

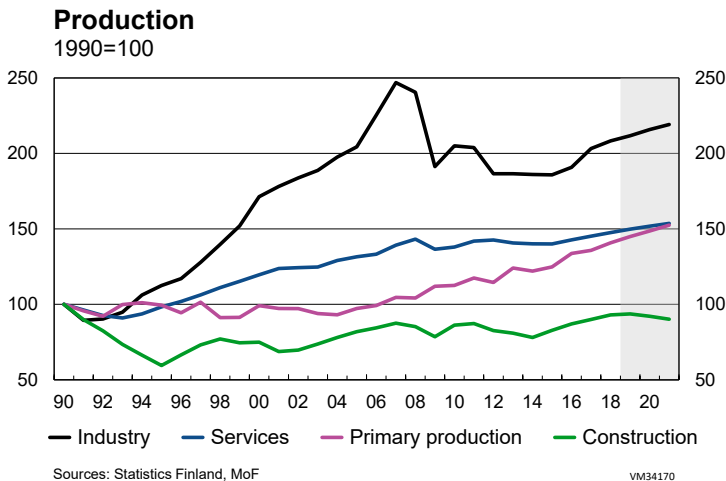
## 1.4 Domestic production

### 1.4.1 Total output

#### Economic growth will continue, although at a slowing rate

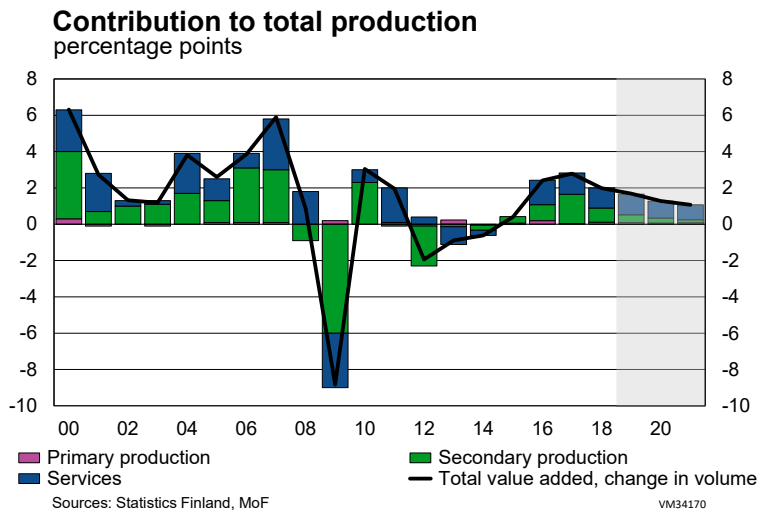
The fastest phase of the current upturn seems to be over as the rate of total output growth slowed down in 2018. The gross value added to the economy grew 2% year on year, which means that the year 2017 was the fastest year of the upturn, which started in 2015. Nevertheless, the gross value added remains one per cent lower than before the financial crisis because Finland's industrial out-put is still at a substantially lower level. The level of economic activity slowed down in 2018 because there was a substantial slowdown in the rate of industrial output growth. Forest industry production declined even though the capacity of the pulp industry increased. Output growth in other major industrial sectors also slowed down, except for the electrical and electronics industry. The output in other major economic sectors (construction and services) increased at almost the same rate as in 2017. In services, the growth was more evenly distributed as both private and public service production increased.

Economic productivity is weak. Overall labour productivity per hours worked fell by 0.6% in 2018 because there was a decline in productivity in construction and services. Productivity in Finland remains one per cent below the peak reached before the financial crisis but about ten per cent above the euro area average.



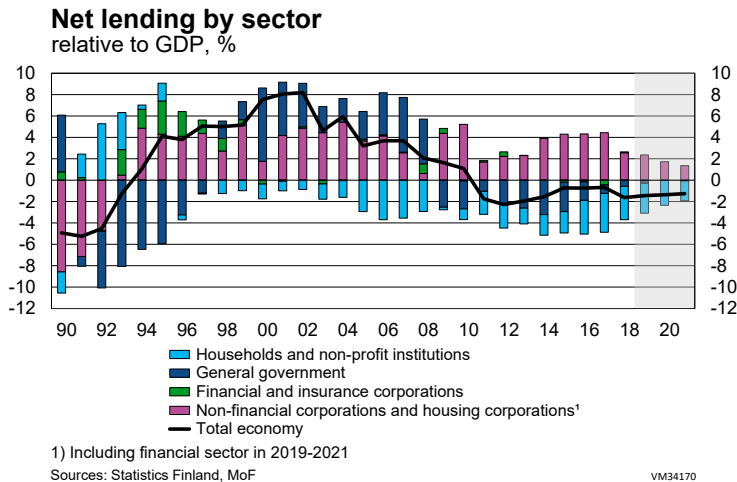


More signs of output growth have been received during the early months of 2019. They include an increase in new orders in manufacturing, higher output expectations in companies, and a continuing construction boom in growth centres. At the same time, there are also signs of limits to the growth because many sectors still suffer from a shortage of skilled labour and weak demand is more common in private business sectors than in 2018.



Despite obstacles to output growth, the level of overall economic activity will increase. The growth is driven by an increase in orders illustrating strong international demand in manufacturing, progress made in numerous construction and renovation projects, and growth in service production. Although the period of fastest growth appears to be over, the business tendency surveys conducted by EK indicate that the positive trend will continue at least for the first half of 2019. The forecast's background assumptions concerning continuing growth of world trade and global economy also support export-oriented industrial production and therefore, indirectly, business services. Growing imports of Finland's most important trading area, Europe, are good news for Finnish industries manufacturing investment and intermediate products. Due to broad-based growth and a positive growth base, gross value added for the economy will grow by slightly more than 1.5% this year. Growth rate will level off in 2020 and 2021, but total output will still increase by slightly more than one per cent in both years.

The forecast described above involves a large number of risks. There are numerous uncertainties that may slow down the growth by weakening international demand and, consequently, export-oriented industrial production. At the same time, however, capacity increases in industries and services arising from the realisation of investment plans may lead to faster than expected growth.



## 1.4.2 Secondary production

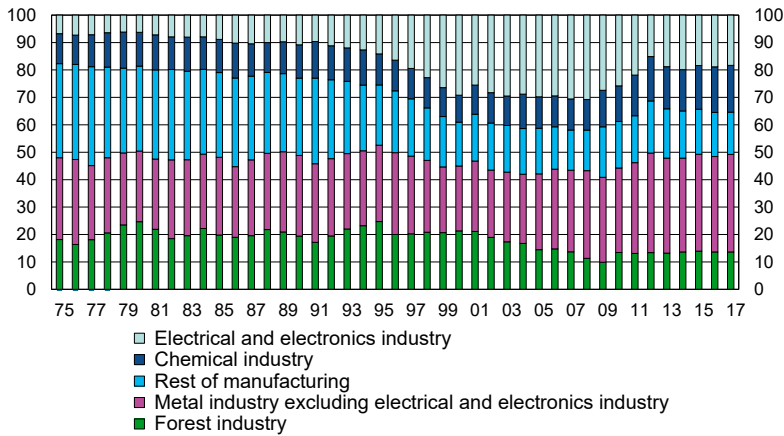
### Growth in manufacturing output is slowing down

The upturn in manufacturing industries is slowing down. Last year, manufacturing output increased by 2.5%, which was less than in 2017. The volume of forest industry output actually declined as prices increased significantly faster than the value of production. In other main sectors, the value added continued to increase and in the electrical and electronics industry, the rate of growth was actually faster than in 2017.

Raw materials and investment goods for export account for most of Finland's industrial output and the demand for these items has improved as the global economy and trade have picked up and capacity utilisation has been boosted by economic growth. At the same time, however, the cost competitiveness of Finnish companies in terms of unit labour costs no longer improved in 2018 when compared to the euro area. In fact, there was a slight decrease in the value of new manufacturing orders. However, the order stock remains strong in many sectors. The highest number of orders has been won by the forest industry but increasing order books have also been reported by the chemical industry. The outlook for manufacturing output for the first half of the year is therefore positive.

## Manufacturing

% of gross value added



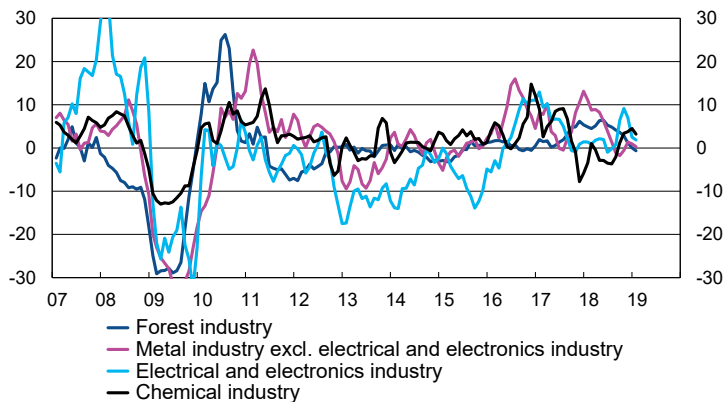
Source: Statistics Finland

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According to the business tendency surveys, forest, textile and chemical industries have the best outlook for growth in the near future. Wood processing and printing industries are the sectors with the weakest outlook. In forest industry, the output is pushed up by increased demand for pulp, paperboard and sawn timber. Capacity increases in the sector will also boost growth in the forest industry. In particular, orders for transport equipment will uphold production in the metal industry for years to come. As a whole, industrial output will increase by two per cent this year, a result of positive growth prospects and the new orders received in the early months of the year.

## Volume index for industrial production

3-month moving average, change yoy, %



Source: Statistics Finland

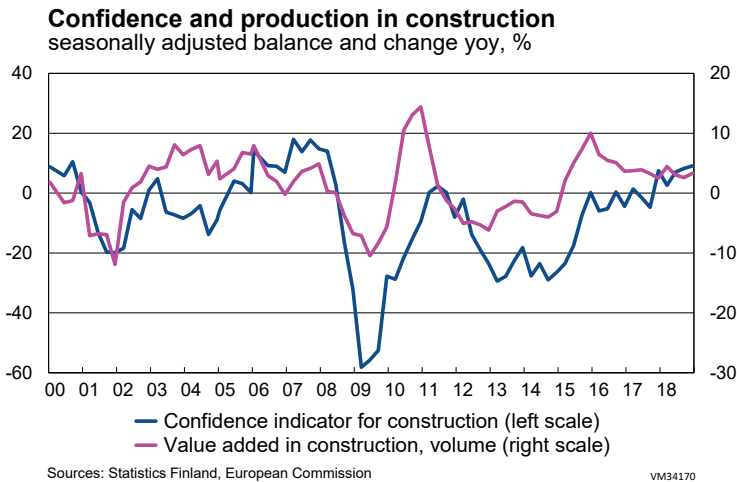
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In the coming years, export demand will increase as world trade growth continues and imports are expected to grow in 2020 and 2021 in the European market in particular, which is important for Finnish companies. Increased production capacity and efforts by companies to improve the competitiveness of their products will boost industrial output in the years ahead. Industrial value added will grow by about two per cent next year but only by 1.5% in 2021. Despite the growth, the volume of industrial output in 2021 will remain ten per cent lower than in the peak year of 2007.

### **The level of construction activity will fall, albeit from a high level**

Construction was one of the sectors supporting total output growth in 2018. Value added continued to grow at a steady rate of more than three per cent. There are still numerous major construction projects in progress. The diverse nature of the construction activity also helped to boost the growth. Migration is boosting the demand for housing in growth centres, while companies have also launched capacity expansion and replacement projects, which was reflected in the construction of commercial, office and industrial buildings. However, levels of new construction are higher in growth centres than outside them, which means that growth is unevenly distributed across the regions. The need for renovation construction is high, particularly in residential and office buildings.

The outlook for output in construction remains fairly positive because the order book is higher than average. However, many large buildings will be completed this year and some of them are one-off projects, which means that there will not be similar new construction projects to replace them in the near future. The number of building permits is also on the decrease, especially in residential, commercial and office construction. The construction business is also the sector with the most serious shortage of skilled labour. Supported by ongoing building projects, output in the construction sector will increase by almost one per cent this year but construction activities are no longer the engine for economic growth in the same way as in the last four years.

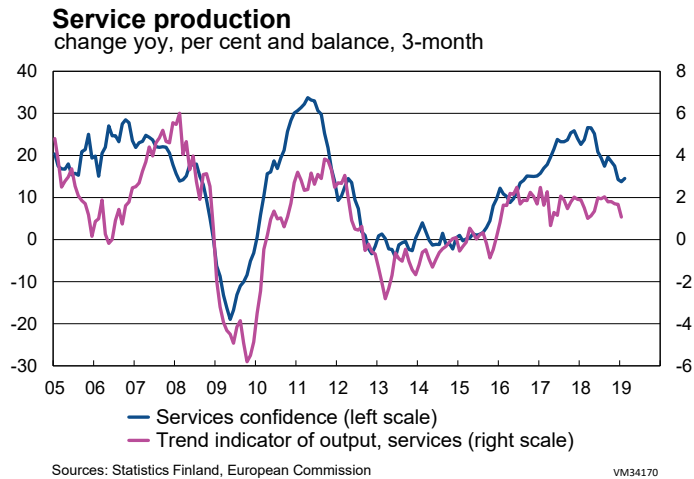


Construction will remain buoyant in growth centres in both 2020 and 2021, but the number of new starts will no longer increase as much as in recent years, which means that construction will decline. In 2020 and 2021, the focus will be on a small number of regional construction projects and renovation construction, which means that construction value added will decrease at an annual rate of about 1.5%. However, the level of construction seems to remain well above the level reached before the financial crisis.

### 1.4.3 Services

#### Broad-based growth in services

Services are the basis for economic growth. Service production has grown continuously for three years and the growth rate remained at reasonable levels last year: value added increased by 1.6% compared to 2017. There was substantial growth in services value added in the private sector and a slight growth was also recorded in public-sector services. The growth was strongest in business services. A strong increase in purchasing power also boosted the sales of consumer services.



The cyclical position of private services remains positive. Sales are on the increase and are generally expected to continue to grow during the first half of 2019. Growth in the service sectors is hampered by weak demand and a shortage of skilled workforce. The information and communication services as well as the real estate business are the sectors best-placed for growth. Sales in the retail and wholesale sector are also expected to grow. At the same time, the outlook for finance and insurance are weaker than in other sectors. The increase of value added in services this year will be 1.5% year on year.

In the future, services will be supported by the demand for end and intermediate products of industries and other service sectors, which means that services remain well-placed for growth. Consumer-driven services will benefit from increases in purchasing power. In 2020 and in 2021, there will be a slight slowdown in service production growth and the average annual growth will be at slightly more than one per cent.

**Table 10. Production by industry**

	2018	2016	2017	2018	2019**	2020**	2021**	Average
	share, % <sup>1</sup>	change in volume, %						2018/2008
Industry	21.4	2.7	6.5	2.5	1.7	1.9	1.6	-1.4
Construction	7.3	5.1	3.3	3.3	0.8	-1.7	-2.1	0.9
Agriculture and forestry	2.9	7.1	1.5	3.7	3.0	2.6	2.6	3.0
Industry and construction	28.7	3.2	5.7	2.7	1.5	1.0	0.7	-0.9
Services	68.4	1.9	1.7	1.6	1.6	1.3	1.2	0.3
<b>Total production at basic prices</b>	<b>100.0</b>	<b>2.4</b>	<b>2.8</b>	<b>2.0</b>	<b>1.7</b>	<b>1.3</b>	<b>1.1</b>	<b>-0.0</b>
GDP at market prices		2.8	2.7	2.3	1.7	1.4	1.2	0.2
Labour productivity in the whole economy		2.1	1.8	-0.6	0.5	1.0	0.9	0.1

1) Share of total value added at current prices.

## 1.5 Labour force

### Falling unemployment will mean a tighter labour market

During 2018, employment grew more rapidly than what could be concluded on the basis of the level of economic activity. According to the labour force survey, the number of employed persons grew by 2.7% in 2018 and the employment rate stood at 71.7%. However, in February 2019, the seasonally adjusted employment rate was already at 72.5%.

In 2018, the number of hours worked increased by 2.4%, almost as rapidly as the employment. It seems that the activation model has only led to a small increase in temporary employment because according to the labour force survey, there was only a slight increase in the proportion of fixed-term employment relationships in 2018.

There has been a further increase in the labour demand. According to Statistics Finland, the number of job vacancies in the fourth quarter of 2018 was substantially higher than a year before. According to the confidence indicators of the European Commission, the employment expectations of Finnish companies remained at high level in January. However, when measured with the vacancy rate (the percentage of job vacancies of all jobs), Finland is only at average level among EU countries.

The number of employed persons will increase by 1.2% in 2019 even though the stagnation in housing construction will start slowing down employment growth during the last months of the year. The employment rate for the whole of 2019 is expected to be at 72.7%.

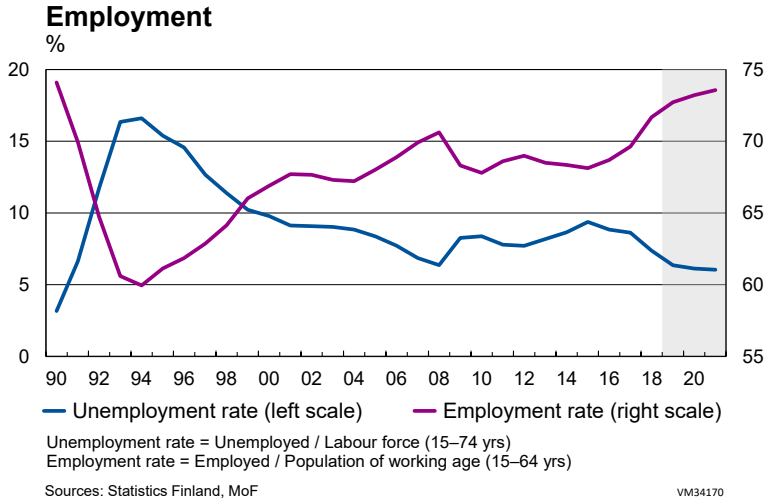
According to the labour force survey of Statistics Finland and the employment service statistics of the Ministry of Economic Affairs and Employment, there was a rapid decline in unemployment<sup>1</sup> in 2018 and the unemployment rate for the year stood at 7.4%. Unemployment decreased in all regions and in all age groups. In February 2019, the seasonally adjusted unemployment rate had already fallen to 6.5%. Driven

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1 The report 'The overall costs of unemployment for the national economy' was published in January (Publications of the Government's analysis, assessment and research activities 16/2019): <http://urn.fi/URN:ISBN:978-952-287-645-4>. At the level of the national economy, the overall costs of unemployment totalled EUR 10.8 billion in 2016. The report also examines the costs of the unemployment at individual level using the SISU microsimulation model and assesses the costs and benefits of the labour market policy measures.



by a growth in employment, there will also be a substantial fall in unemployment in 2019. The projected unemployment rate for 2019 is 6.3%.



A slowdown in economic growth and a rise in nominal wages will gradually weaken the growth in the demand for labour force in 2020 and 2021. The fact that unemployment is falling to the levels experienced during the cyclical peak before the financial crisis will mean a tighter labour market, which in turn will create more pressures for wage increases and create labour bottlenecks in the Finnish economy.

Growth in the number of employed persons will slow down to 0.4% in 2020 and to 0.3% in 2021. Further decline in the working-age population will push the employment rate to 73.6% in 2021.

The number of long-term and structurally unemployed is still above the levels recorded during the last cyclical peak in 2008 even though the abolition of the unemployment pension scheme in 2010 makes the comparisons more difficult. There was again a substantial decline in the number of people belonging to this category (the 'hard core' of the unemployed) last year, which has provided room for a decrease in the overall unemployment rate. As the employment rate is continuing to increase, there will be a further reduction in the number of unemployed in 2020. However, due to rising labour costs the unemployment rate will not fall below six per cent in 2021.

A tighter labour market has already led to labour bottlenecks in a number of professions. According to the business tendency survey published by EK and the employment outlook by occupation published by the Ministry of Economic Affairs and Employment, there is a shortage of construction and real estate service professionals as well as ICT, social and health sector experts.

**Table 11. Labour market**

	2016	2017	2018	2019**	2020**	2021**
	annual average, 1,000 persons					
Population of working age (15–74 yrs)	4109	4114	4124	4130	4131	4123
change	7	5	10	6	1	-8
Population of working age (15–64 yrs)	3463	3451	3439	3431	3423	3416
change	-13	-12	-12	-8	-8	-7
Employed (15–74 yrs)	2448	2473	2540	2571	2582	2589
of which 15–64 yrs	2379	2403	2465	2495	2506	2513
Unemployed (15–74 yrs)	237	234	202	174	169	166
	%					
Employment rate (15–64 yrs)	68.7	69.6	71.7	72.7	73.2	73.6
Unemployment rate (15–74 yrs)	8.8	8.6	7.4	6.3	6.1	6.0
	1,000 persons per annum					
Immigration, net	16	17	16	15	15	15

## 1.6 Incomes, costs and prices

### 1.6.1 Wages and salaries

In 2018, nominal earnings rose by 1.8%, as measured by the index of wage and salary earnings. Boosted by employment growth, the total wage bill increased by 4.7% last year.

Contractual wage increases will be higher in 2019 and the wage drifts coming on top of them are expected to grow faster. As a result, nominal earnings will rise by 2.8%. As the employment rate is rising, the total wage bill is expected to grow by 4.0% this year.

With falling unemployment and tightening labour market, the rate of growth in earnings is expected to approach the annual rate of three per cent, the average for the past 18 years. Reinstatement of the holiday bonuses in the public sector will also temporarily boost earnings in 2020, and as a result, nominal earnings are expected to grow by 3.3% and the total wage bill by 3.7%. In 2021, nominal earnings will grow by 3.1% and the total wage bill by 3.4%.

**Table 12. Disposable income**

	2018	2016	2017	2018	2019**	2020**	2021**	Average
	share, %	change, %						2018/2008
Compensation of employees	47.3	1.7	0.6	3.9	3.2	3.9	3.1	1.7
Wages and salaries	39.1	1.4	2.2	4.7	4.0	3.7	3.4	2.0
Employers' contributions to social security schemes	8.2	2.5	-5.9	1.4	-0.2	4.6	2.5	0.4
Property and entrepreneurial income, net	22.2	7.7	7.8	2.6	6.4	4.0	4.2	0.9
Taxes on production and imports minus subsidies	13.2	5.9	1.4	5.2	2.9	2.1	2.2	3.1
National income	100.0	3.8	2.6	3.9	4.0	3.6	3.3	1.8
Disposable income		3.7	2.7	3.6	3.7	3.4	3.2	1.8
Gross national income, EUR bn		219.0	224.6	232.9	241.4	249.5	257.4	

**Table 13.** Index of wage and salary earnings and labour costs per unit of output

	2016	2017	2018	2019**	2020**	2021**	Average
	change, %						2018/2008
Index of negotiated wage rates	0.6	-0.3	1.2	2.0	2.3	2.1	1.1
Wage drift, etc.	0.3	0.5	0.6	0.8	1.0	1.0	0.5
<b>Index of wage and salary earnings</b>	<b>0.9</b>	<b>0.2</b>	<b>1.8</b>	<b>2.8</b>	<b>3.3</b>	<b>3.1</b>	<b>2.0</b>
Real earnings <sup>1</sup>	0.5	-0.5	0.6	1.5	1.7	1.4	0.8
Average earnings <sup>2</sup>	0.7	0.3	2.1	2.9	3.4	3.2	2.0
Labour costs per unit of output whole economy <sup>3</sup>	-0.8	-2.1	2.1	1.6	2.5	2.1	1.8

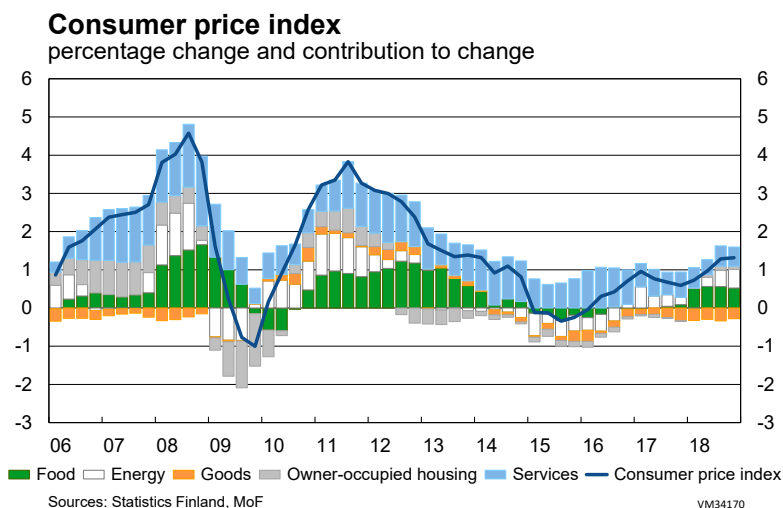
1) The index of wage and salary earnings divided by the consumer price index.

2) Computed by dividing the national wage bill by the number of hours worked by wage and salary earners. The figures are affected by structural changes in the economy.

3) Compensation of employees divided by gross value added in volume at basic prices.

## 1.6.2 Consumer prices

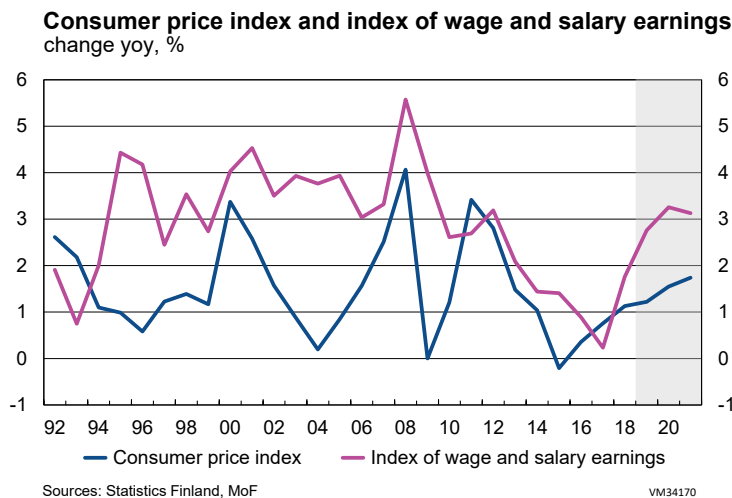
The inflation in 2018 was 1.1%, when measured with the national consumer price index. The inflation accelerated significantly from 2017, when consumer prices rose by 0.7%. Increases in energy, food and service prices were the main factors boosting consumer prices in 2018. Both fuel and electricity prices rose from 2017 and the overall increase in energy prices was 4.5%. Food prices rose by 3.1% compared to an increase of 0.2% in 2017. Service prices rose by 1.2%, or at a slightly slower rate than in the previous year. Changes in indirect taxation boosted the inflation rate by about 0.4 percentage points.



In January 2019, the annual change in the consumer price index was 1.1%, meaning that inflation has slowed down slightly from the figures for the last months of 2018. The main reason for the slowdown is the weakening of the base effect of energy prices and a fall in oil prices during the fourth quarter of 2018. However, crude oil prices have been on the increase again since the start of 2019, and further moderate increases are expected during the outlook period. According to the forecast, crude oil barrel prices in euros will, however, remain lower than in 2018. At the same time energy prices will be boosted by increases in electricity prices.

The projected inflation rate for 2019 is 1.2%. As earnings are rising, prices of services are expected to increase more rapidly than in 2018. However, as in 2018, prices in goods will have a negative impact on inflation and as a result, baseline inflation will remain moderate. Boosted by tax increases, prices of food, alcohol and tobacco products are expected to rise during the year, though at a slower rate than in 2018.

As a whole, inflationary pressures are expected to grow only slowly in the later years of the outlook period. The rise in earnings is expected to gradually have a broader impact on prices and consumer demand will grow steadily. Raw material prices will increase only moderately, however. Euro area market rates are expected to start rising slowly during the outlook period, which will help to slow down inflationary pressures. The national consumer price index is expected to rise by 1.5% in 2020 and by 1.7% in 2021.



Inflation in the euro area was 1.7% in 2018. Baseline inflation remains at moderate level and no significant increases are expected in the coming years. According to expert estimates published by the European Central Bank in March 2019, inflation in the euro area is expected to slow down to 1.2% in 2019, accelerate to 1.5% in 2020 and reach 1.6% in 2021. In 2018, the inflation rate in Finland was below euro area average, mainly due to slow increases in goods prices. The inflation is expected to remain at average euro area levels in the outlook period.

**Table 14. Price indices**

	2016	2017	2018	2019**	2020**	2021**	Average
	change, %						2018/2008
Export prices <sup>1</sup>	-1.9	3.3	4.0	2.3	2.1	1.9	0.6
Import prices <sup>1</sup>	-2.2	3.4	3.5	2.5	2.3	1.8	0.5
Consumer price index	0.4	0.7	1.1	1.2	1.5	1.7	1.2
Harmonised index of consumer prices	0.4	0.8	1.2	1.3	1.5	1.7	1.5
Basic price index for domestic supply, including taxes	-1.2	4.9	4.7	2.3	2.4	2.3	1.4
Building cost index	0.5	0.3	2.2	2.1	2.3	2.4	1.1

<sup>1</sup> As calculated in the National Accounts

## 2 Public finances

### 2.1 General government finances

The steady growth of the Finnish economy for the past three years has improved the general government finances. There was a further narrowing in the general government deficit last year. The Finnish economy will still perform reasonably well in the next few years and the general government budgetary position will achieve balance. Economic growth will slow down further as we enter the 2020s and there will be a gradual weakening in the general government budgetary position.

General government debt-to-GDP ratio fell below 60% in 2018. However, in euro terms, the debt ratio is still rising. Despite the economic upturn, the debt ratio has improved only slowly. The fiscal buffers built for the next downturn are extremely thin. The general government debt-to-GDP ratio will start growing again at the start of the 2020s.

There are still serious structural problems in Finland's public finances even though a brief period of balance is in sight. The population is ageing, which will mean pressures in the pension, health care and long-term care expenditure. As we are entering the 2020s, Finland should have a substantial surplus in its public finances so that it would be able to face the pressures arising from an ageing population on a sustainable basis.

Last year, central government was the general government<sup>1</sup> sector with the highest deficit. The deficit will narrow slightly in the next few years as a result of the eco-

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<sup>1</sup> Finland's general government finances consists central government, local government and the social security funds, which are further divided into earnings-related pension funds handling statutory pension insurance schemes, and other social security funds.

nomic upturn but in the medium term, it will start growing again. Fiscal consolidation measures will come to an end this year and a more rapid rise in expenditure is expected in the coming years. Slow growth in tax revenue combined with higher consumption expenditure weakened the local government budgetary position last year. The deficit in local government finances will start growing towards the end of the outlook period. As the population is ageing, the need for services is increasing, which will also burden local government finances in the decade after that. The combined central and local government deficit will amount to EUR 3.3 billion at the start of the 2020s.

The earnings-related pension funds, which are part of the social security funds, have a substantial surplus. The surplus of these funds will remain at slightly more than one per cent in the outlook period. Even though pension expenditure is rising rapidly, steady economic growth is generating more pension contribution payments, while higher interest rates are boosting property income. Other social security funds have a slight surplus. Unemployment expenditure is expected to fall further and the estimate is that the unemployment insurance contribution will be lowered in the outlook period. Lowering the contribution will reduce the surplus of the social security funds close to balance.

There was a further decline in the expenditure rate (expenditure to GDP ratio) in 2018. The rate has fallen by five percentage points from its peak in 2014. The reduction has been due to measures slowing down expenditure growth and lower unemployment expenditure. The expenditure rate will stay at slightly above 52% in the outlook period. The tax rate (taxes and tax-like payments relative to GDP) has decreased as a result of tax cuts and the Competitiveness Pact. The tax rate will remain more or less unchanged in the outlook period.

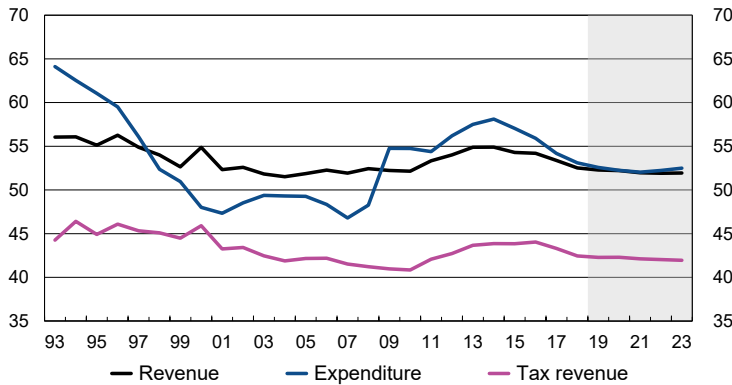
Finland is in compliance with the deficit and public debt criteria defined in the Treaty on the Functioning of the European Union. The estimate is that Finland is also in compliance with the preventive arm of the Stability and Growth Pact. Compliance with the EU rules is described in more detail in Finland's Stability Programme (Appendix 5 to the spring 2019 General Government Fiscal Plan).

The risks affecting general government finances are closely connected to overall economic developments. If economic growth is slower than forecast, the rise in tax revenue will remain weaker than predicted and such expenditure items as cyclical



unemployment spending will increase faster than expected. The impacts of economic growth rates differing from the forecasts on tax revenue depend on the factors behind the difference. The degree to which the forecast error concerning overall economic growth depends on domestic demand rather than on changes arising from external demand determines the level of the impact. The second risk arises from the substantial growth in general government contingent liabilities after the 2008 financial crisis. Extensive realisation of the liabilities would lead to higher public spending and would make the impacts of a higher debt-to-GDP ratio more severe during a downturn.

**General government revenue, tax revenue and expenditure**  
relative to GDP, %



Sources: Statistics Finland, MoF

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**Table 15. General government finance<sup>1)</sup>**

	2016	2017	2018	2019**	2020**	2021**
	EUR billion					
Current taxes	35.6	37.2	37.4	39.6	40.7	42.4
Taxes on production and imports	31.1	31.5	33.1	33.5	34.1	34.7
Social security contributions	28.0	27.3	28.0	28.4	30.1	30.7
Taxes and contributions, total <sup>2)</sup>	95.2	97.0	99.1	102.2	105.6	108.5
Other revenue <sup>3)</sup>	22.5	23.5	24.2	24.9	25.5	26.1
of which interest receipts	1.9	1.8	1.9	2.0	2.1	2.2
<b>Total revenue</b>	<b>117.1</b>	<b>119.5</b>	<b>122.7</b>	<b>126.4</b>	<b>130.4</b>	<b>133.9</b>
Consumption expenditure	51.5	51.5	53.0	54.5	56.6	58.4
Subsidies	2.7	2.7	2.7	2.8	2.7	2.8
Social security benefits and allowances	42.2	42.6	43.1	44.0	45.1	46.3
Other current transfers	5.7	5.3	5.7	5.6	5.8	6.0
Subsidies and current transfers, total	50.6	50.6	51.5	52.3	53.6	55.1
Capital expenditure <sup>4)</sup>	9.2	9.5	9.9	10.2	10.2	10.2
Other expenditure	9.5	9.7	9.6	10.0	10.2	10.4
of which interest expenses	2.3	2.2	2.0	2.1	2.1	2.2
<b>Total expenditure</b>	<b>120.8</b>	<b>121.3</b>	<b>124.0</b>	<b>127.1</b>	<b>130.5</b>	<b>134.1</b>
<b>Net lending (+) / net borrowing (-)</b>	<b>-3.7</b>	<b>-1.8</b>	<b>-1.3</b>	<b>-0.7</b>	<b>-0.1</b>	<b>-0.2</b>
Central government	-5.7	-4.1	-2.7	-1.8	-1.8	-1.7
Local government	-0.9	-0.4	-1.8	-1.8	-1.5	-1.7
Employment pension schemes	2.4	2.0	2.5	2.5	2.8	2.9
Other social security funds	0.5	0.7	0.7	0.4	0.4	0.2
<b>Primary balance<sup>5)</sup></b>	<b>-3.3</b>	<b>-1.3</b>	<b>-1.1</b>	<b>-0.5</b>	<b>-0.0</b>	<b>-0.2</b>

1) As calculated in the National Accounts

2) Incl. capital taxes

3) Incl. capital transfers and consumption of fixed capital

4) Gross fixed capital formation and capital transfers

5) Net lending before net interest expenses

**Table 16. Main economic indicators in general government**

	2016	2017	2018	2019**	2020**	2021**
	relative to GDP, %					
Taxes and social security contributions	44.0	43.3	42.5	42.3	42.3	42.1
General government expenditure <sup>1</sup>	55.9	54.2	53.1	52.6	52.2	52.0
Net lending	-1.7	-0.8	-0.6	-0.3	-0.0	-0.1
Central government	-2.7	-1.8	-1.2	-0.7	-0.7	-0.7
Local government	-0.4	-0.2	-0.8	-0.7	-0.6	-0.6
Employment pension institutions	1.1	0.9	1.1	1.1	1.1	1.1
Other social security funds	0.2	0.3	0.3	0.2	0.2	0.1
Primary balance <sup>2</sup>	-1.5	-0.6	-0.5	-0.2	-0.0	-0.1
General government debt	63.0	61.3	58.9	58.1	57.4	57.4
Central government debt	47.4	47.2	44.9	44.2	43.4	43.3
General government employment, 1,000 person	614	619	618	617	614	613
Central government	131	131	131	131	129	128
Local government	472	476	476	474	474	474
Social security funds	11	11	11	11	11	11

1) EU-harmonized definition

2) Net lending before net interest expenses

**Table 17. Fiscal balance and debt ratios in some EU economies**

	2017	2018	2019**	2017	2018	2019**
	Fiscal balance			Debt		
	relative to GDP, %					
*Finland	-0.8	-0.6	-0.3	61.3	58.9	58.1
Finland	-0.7	-0.8	-0.2	61.3	59.8	58.5
United Kingdom	-1.8	-1.3	-1.0	87.4	86.0	84.5
Sweden	1.6	1.1	1.0	40.8	37.9	35.5
Denmark	1.1	0.2	-0.1	36.1	33.3	32.2
Ireland	-0.3	-0.1	-0.1	68.4	63.9	61.1
Spain	-3.1	-2.7	-2.1	98.1	96.9	96.2
The Neatherlands	1.2	1.1	1.1	57.0	53.2	49.6
Luxembourg	1.4	1.3	1.2	23.0	21.4	20.8
Portugal	-3.0	-0.7	-0.6	124.8	121.5	119.2
Austria	-0.8	-0.3	0.0	78.3	74.5	71.0
Germany	1.0	1.6	1.2	63.9	60.1	56.7
France	-2.7	-2.6	-2.8	98.5	98.7	98.5
Belgium	-0.9	-1.0	-1.1	103.4	101.4	99.8
Italy	-2.4	-1.9	-2.9	131.2	131.1	131.0
Greece	0.8	0.7	0.7	176.1	182.5	174.9

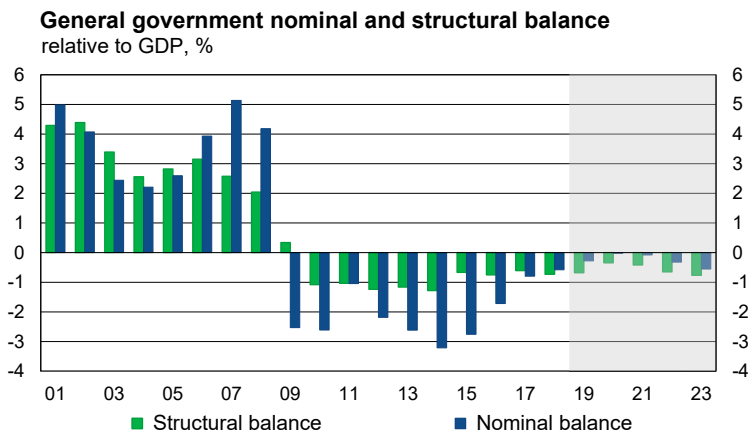
Source: EU Commission Autumn Forecast 2018; \*Finland: Ministry of Finance, Spring 2019

### 2.1.1 Estimates of fiscal policy impact

When examined on the basis of specific revenue and expenditure transactions, fiscal policy will be slightly more contractionary at general government level in 2019 than in 2018. The Government of Prime Minister Juha Sipilä has introduced adjustment measures in central government finances totalling about EUR 0.6 billion, which include index freezes. Adjustment measures introduced at local government level also have a slightly contractionary impact on fiscal policy. At the same time, the tax cuts introduced by the Government have an expansionary effect on fiscal policy.

The fiscal policy stance can also be examined on the basis of the changes in structural deficit estimated using the calculation method jointly agreed by the EU Member States. Examining the fiscal policy stance on this basis does not necessarily give a picture that is fully identical with the results of a review based on specific revenue and expenditure transactions. For example, the growth in age-related expenditure will widen the structural deficit in the outlook period even if no new decisions on spending increases were made. Changes in the structural deficit between 2016 and 2019 are examined in more detail in the box below.

The structural deficit is expected to remain unchanged in 2019, which means that on this basis, fiscal policy can be considered as neutral. A growth in age-related expenditure will widen the structural deficit. The structural deficit will narrow in 2020. There will be a gradual widening of the structural deficit after this as the measures consolidating general government finances are coming to an end and the ageing of the population is increasing public spending.



Based on the European Commission's production function approach

Sources: Statistics Finland, MoF

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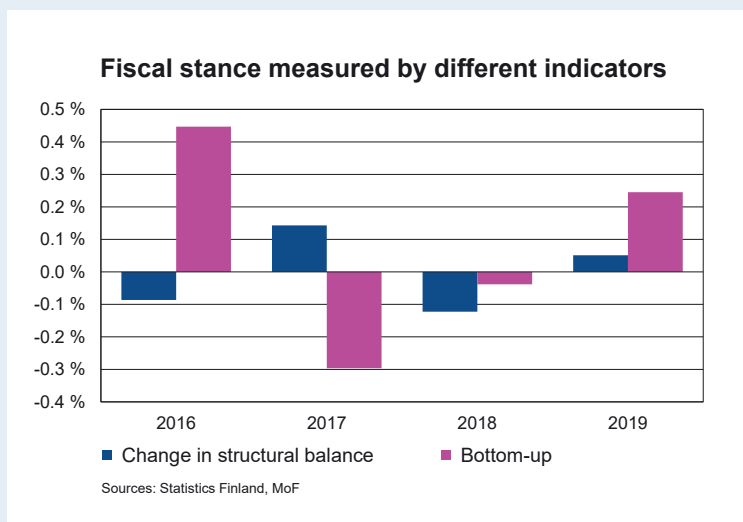
## FISCAL STANCE DURING THE CURRENT PARLIAMENTARY TERM

The fiscal stance during the 2016-2019 parliamentary term is reviewed in this box. The review is carried out on the basis of two different indicators: general government structural balance and 'bottom-up' indicator summing up discretionary measures.

The concept of structural balance is mainly used in EU in the monitoring of Member States' fiscal stance. In this indicator, the impacts of cyclical, one-off and temporary factors are eliminated from the general government financial balance after which the yearly change in the budgetary position can be attributed to discretionary fiscal policy.

The bottom-up indicator sums up the policy measures on which decisions have been made and which provide an overall picture of the actual fiscal policy. These measures include the key measures set out in the Government Programme, such as consolidation measures, tax decisions, the Competitiveness Pact and the key projects. Changes in social security contributions are also included in the indicator. The measures are described in more detail in section 8.1 of the spring 2019 General Government Fiscal Plan. The indicators used in the review and their advantages and weaknesses are detailed in the Ministry of Finance's discussion paper<sup>1</sup>

**Figure 1** Annual change in structural budgetary position (in percentage points) and annual (net) change in discretionary measures, % of GDP.



<sup>1</sup> Assessing the discretionary fiscal effort - presenting alternative indicators - <https://vm.fi/julkaisu?pubid=22601>

There was a slight increase in the structural deficit in 2016 compared to the previous year, which means that the fiscal policy was expansionary using this indicator. At the same time, according to the bottom-up indicator, fiscal policy was substantially contractionary. Many of the consolidation measures introduced by the Government of Prime Minister Juha Sipilä started to have an impact in 2016. The unemployment insurance contribution was also raised in 2016. At the same time, taxes were lowered by, for example, increasing the earned income deduction.

The indicators also show a different fiscal policy stance for the year 2017. Structural balance strengthened, while at the same time, according to the bottom-up indicator, fiscal policy had an expansionary effect. In 2017, structural balance was strengthened by number of revenue-boosting one-off factors<sup>2</sup>. However, in the method jointly agreed by the EU Member States, these factors are not considered as one-off items that should be eliminated from the budgetary position when the structural balance is estimated. If the impact of the measures had been eliminated, structural balance would also have weakened in 2017. In the 'from down to top' indicator, the Competitiveness Pact and the tax cuts linked to it appear as measures with a substantially expansionary effect in 2017.

The fiscal stance for 2018 appears neutral on the basis of both indicators. The absence of the one-off measures and the exceptionally large tax refunds for 2017, which were recorded in the 2018 tax revenue, are the reasons for the change in the 2018 structural balance.

The estimate for the year 2019 is based on the projections for the nominal general government financial balance. The change in the structural deficit suggests a neutral fiscal policy, whereas on the basis of the 'from down to top' indicator, the policy has been slightly contractionary. The Government's key projects will come to an end in 2019 and new adjustment measures will also be introduced.

According to the 'from down to top' indicator, the overall contractionary impact of the fiscal policy between 2016 and 2019 has been 0.3% relative to GDP, or slightly less than one billion euros. The fiscal policy has been made more contractionary by the adjustment measures, the impact of which has been mitigated by tax cuts and the Competitiveness Pact. At the same time, however, the bottom-up indicator does not include all adjustment measures, such as those introduced at local government level. Moreover, the bottom-up indicator also includes the changes in social security contributions, which are not entirely at the discretion of the Government or Parliament. When examined on the basis of the structural balance, the fiscal stance as a whole has been neutral during the current parliamentary term.

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<sup>2</sup> Corporate income tax revenue was boosted by a one-off factor connected to company acquisitions and the inheritance and gift tax revenue was also exceptionally high compared to previous years. The combined impact of these one-off factors is about 0.4% of GDP.

One important factor explaining the differences between the indicator results is the ageing of the population. It boosts age-related expenditure every year, and thus also weakens the structural balance. The ageing of the population will automatically boost public expenditure each year around 0.2% of GDP. Partially as a result of these developments, the fiscal policy stance has been more or less neutral during the current parliamentary term, when examined on the basis of the changes in structural balance. The impacts of the ageing population are not considered in the bottom-up indicator. Roughly speaking, the figures can be interpreted so that in overall terms, discretionary fiscal policy measures taken between 2016 and 2019 have only prevented the weakening of structural balance in a situation where age-related expenditure has increased.

It should also be noted that especially the real-time measurements of the structural balance involve uncertainty when estimates of the output gap and projections of the general government budgetary position are made. During the current parliamentary term, the picture that it has given of the fiscal policy stance has changed several times as more information on the cyclical situation and general government budgetary position has become available.

### 2.1.2 General government debt

The general government debt-to-GDP ratio fell to 58.9% last year. The ratio has decreased each year since 2016. In euro terms, general government debt only rose by EUR 0.3 billion last year. In absolute terms, the debt is still increasing but because of economic growth, the debt ratio will shrink next year. However, after 2020, the debt ratio will start increasing again as economic growth is slowing down and the general government budgetary position is weakening.

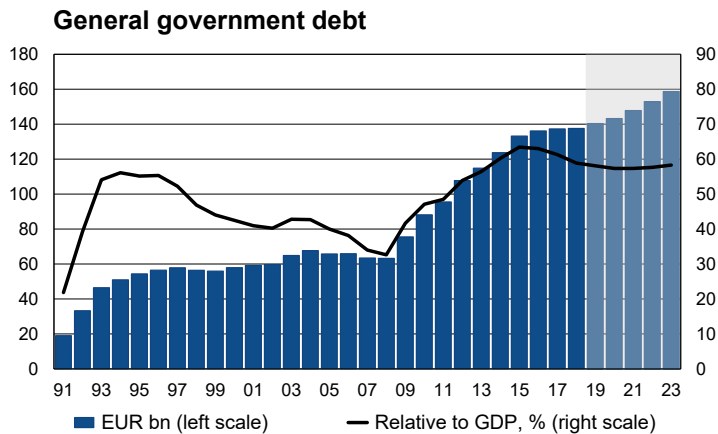
On-budget debt totals about EUR 104 billion and it accounts for most of Finland's general government debt. Central government debt amounted to EUR 115 billion in 2017. In 2018, on-budget debt decreased for the first time in ten years and the reduction was about EUR 0.9 billion. Local government debt increased by EUR 0.9 billion, to EUR 20 billion. The debt of social security funds declined by EUR 0.6 billion.

In addition to on-budget debt, a number of other items are also included in general government debt. For example, central government debt includes the debts of a number of off-budget units and companies as well as the collateral on the derivative contracts used in the management of the central government debt portfolio. Local government debt also includes the debt of many municipality-owned companies. The debt of the social security funds comprises the debts of the Employment Fund and the cash collateral on the derivatives of employment pension institutions.

**Table 18. Change in general government debt ratio and related factors**

	2017	2018	2019**	2020**	2021**	2022**	2023**
Debt ratio, relative to GDP, %	61.3	58.9	58.1	57.4	57.4	57.7	58.3
Change in debt ratio	-1.7	-2.4	-0.8	-0.7	0.0	0.3	0.6
<b>Factors impacting change in debt ratio</b>							
Primary budgetary position	-0.2	-0.3	-0.6	-0.8	-0.8	-0.6	-0.4
Interest expenditure	1.0	0.9	0.9	0.9	0.9	0.9	1.0
Surplus of employment pension schemes (net acquisition of financial assets)	0.9	1.1	1.1	1.1	1.1	1.1	1.1
Other factors <sup>1</sup>	-1.2	-1.5	-0.2	-0.0	0.5	0.5	0.5
Change in GDP	-2.2	-2.5	-2.0	-1.9	-1.7	-1.6	-1.5

1) Includes privatization proceeds, lending and factors related to the valuation and timing of revenue and expenditure.  
Plus indicates increasing effect on debt ratio, minus a lowering effect on debt ratio.



Sources: Statistics Finland, MoF

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The factors behind the changes in the debt ratio are itemised in the table below. GDP growth and a number of other factors were the main reason behind the change in the debt ratio in 2018. The other factors describe events that do not have any impact on the deficit recognised in the national accounts but have an impact on borrowing. For example, last year, the State of Finland was able to cover some of the deficit and reduce borrowing by selling shares. In the outlook period 2019-2023, the debt ratio will be increased by the deficit in central and local government finances, interest payments and other factors (including the first payments of the fighter aircraft purchase). Economic growth is reducing the debt ratio but its effects are expected to gradually decline.



## 2.2 Central government

Finland's central government finances have strengthened over past few years and the trend is expected to continue in 2019. The budgetary position has been improved by slow expenditure growth and a rise in tax revenue, which has been supported by rapid economic growth. A rising employment rate has increased the amount of taxes collected from earned income and led to a fall in unemployment-related expenditure. The adjustment measures introduced by the Government of Prime Minister Sipilä have also helped to slow down expenditure growth.

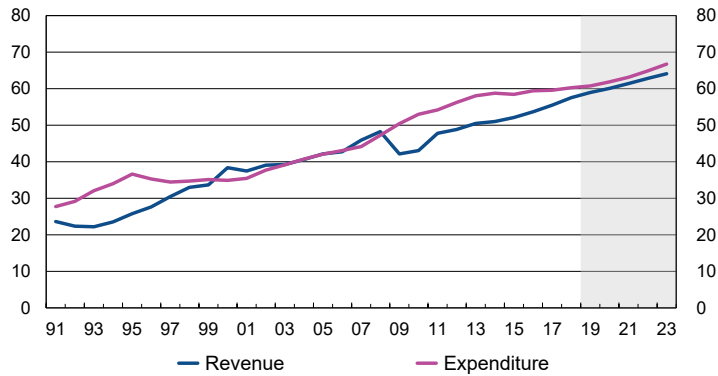
Starting in the early 2020s, there will be a gradual weakening in the central government budgetary position as economic growth is slowing down, a more rapid rise in expenditure can be expected and the measures consolidating central government finances are coming to an end.

Central government debt decreased by EUR 0.8 billion last year and totalled EUR 105 billion at the end of 2018. On-budget economy is expected to be in deficit in the coming years, which means that central government debt will increase during the outlook period. The rate of indebtedness will, however, slow down considerably. Central government debt is expected to total about EUR 120 billion in 2023, which is about 44% of GDP.

At the end of 2018, central government guarantee portfolio amounted to more than EUR 55 billion, which was equal to the annual on-budget expenditure. The guarantee portfolio increased by more than EUR 5 billion during 2018. Government guarantees comprise the guarantees granted by the state, unincorporated state enterprises, state-owned limited liability companies and specialised financing companies, which are ultimately central government liabilities. The guarantees are not expenditure items and do not appear in the budget, unless the state has to pay them.

### Central government revenue and expenditure

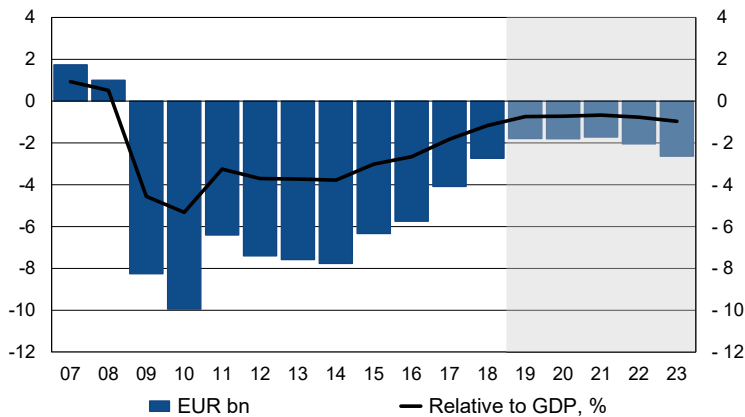
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Sources: Statistics Finland, MoF

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### Central government financial balance

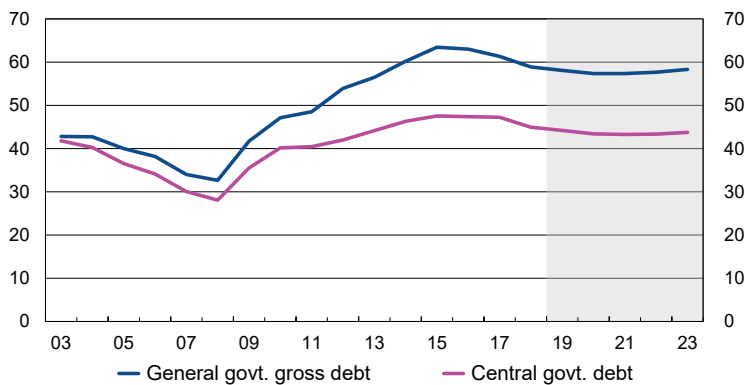


Sources: Statistics Finland, MoF

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### General government debt

relative to GDP, %



Sources: Statistics Finland, MoF

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**Table 19. Central government<sup>1</sup>**

	2016	2017	2018	2019**	2020**	2021**
	EUR billion					
Current taxes	13.7	14.4	14.9	15.7	16.1	16.8
Taxes on production and imports	31.1	31.5	33.1	33.5	34.1	34.7
Social security contributions	0.0	0.0	0.0	0.0	0.0	0.0
Taxes and social security contributions, total <sup>2</sup>	45.3	46.9	48.7	49.8	50.9	52.2
Other revenue <sup>3</sup>	8.7	8.8	9.0	9.0	9.0	8.9
of which interest receipts	0.3	0.3	0.2	0.2	0.2	0.2
<b>Total revenue</b>	<b>54.0</b>	<b>55.7</b>	<b>57.7</b>	<b>58.8</b>	<b>59.9</b>	<b>61.2</b>
Consumption expenditure	14.0	13.5	13.6	13.8	14.3	14.7
Subsidies and current transfers, total	38.8	39.5	40.2	40.2	41.0	41.9
to general government	27.1	28.1	28.4	28.4	28.9	29.4
Interest expenses	2.2	2.1	1.9	1.9	1.9	2.0
Capital expenditure <sup>4</sup>	4.8	4.7	4.7	4.6	4.5	4.3
<b>Total expenditure</b>	<b>59.7</b>	<b>59.7</b>	<b>60.4</b>	<b>60.6</b>	<b>61.7</b>	<b>62.9</b>
<b>Net lending (+) / net borrowing (-)</b>	<b>-5.7</b>	<b>-4.1</b>	<b>-2.7</b>	<b>-1.8</b>	<b>-1.8</b>	<b>-1.7</b>
Primary balance <sup>5</sup>	-3.8	-2.3	-1.0	-0.1	-0.1	0.0

1) As calculated in the National Accounts

2) Incl. capital taxes

3) Incl. capital transfers (excl. capital taxes) and consumption of fixed capital

4) Gross fixed capital formation and capital transfers

5) Net lending before net interest expenses

## Spending may start rising towards the end of the outlook period

Transfers to other sectors of the economy, especially to municipalities and social security funds, account for more than half of all central government expenditure. About one quarter of the spending is consumption expenditure (mostly personnel expenses and purchases of goods and services). Other expenditure items include investments, subsidies and interest payments. According to the national accounts, in 2018 central government expenditure increased by slightly more than one per cent compared to 2017, which was below the average growth rate for the 2010s.

The adjustment measures introduced by the Government of Prime Minister Sipilä and the absence of the additional spending arising from the key projects will still slow down expenditure growth this year. At the same time, however, the elimination of the temporary cuts in holiday bonuses will increase employee compensations in 2019 and 2020. Boosted by the reinstatement of the holiday bonuses and a

substantial increase in central government transfers to municipalities, central government expenditure will grow faster next year.

In the last years of the outlook period, there will be further acceleration in expenditure growth as more will be invested in the basic infrastructure and current transfers to municipalities and social security funds will increase. Low interest rates will keep central government interest payments at low level in the next few years even though the amount of debt will continue to increase.

### **CENTRAL GOVERNMENT ON-BUDGET ACCOUNTS AND EXPENDITURE IN 2020-2023**

The spring 2019 General Government Fiscal Plan for the period 2020-2023 will cover the next parliamentary term. The document is based on a principle that it should not include new policy decisions. The impacts of the decisions taken by the Government of Prime Minister Juha Sipilä on revenue and expenditure levels in the coming years have been taken into account in the document. The plan has been prepared so that it would provide a reliable technical basis for the policy decisions of the Government formed after the elections. The Government appointed after the parliamentary elections in April will make the policy decisions on general government finances for the period 2020-2023 and lay down the spending limits (binding expenditure ceiling) for the parliamentary term.

At the end of the spending limits period (in 2023), on-budget expenditure at current prices will total EUR 63 billion, while revenue will amount to EUR 58 billion. The average on-budget deficit during the spending limits period is estimated at EUR 3 billion each year.

The strongest phase of the current economic upturn is now behind us and economic growth is expected to slow down in the medium term. Finland's GDP will grow at an average annual rate of 1.2% in the period 2019-2023. Changes in tax bases are determined by the overall level of economic activity, which means that the tax revenue will also grow more slowly, at an average rate of 2.7%. Growth in corporate tax revenue will be slowed down by more moderate increases in companies' profits. At the end of the outlook period, the number of employed persons will start declining, which will also be reflected in earned income and capital income tax revenue. Improvements in energy efficiency will reduce energy tax revenue, which in turn will lead to a fall in revenues from excise duties.

It is estimated that an improvement in the employment situation will lead to reductions in cyclical expenditure during the spending limits period. General interest rate levels

are expected to start growing at a moderate pace even though they will remain at exceptionally low levels. This will be reflected in slight increases in on-budget interest payments during the spending limits period even though interest expenses will only total EUR 1.5 billion in 2023. The funding for the Finnish Defence Forces' strategic performance capability projects will increase expenditure levels at the end of the spending limits period. In nominal terms, on-budget expenditure is expected to increase at an average annual rate of 3 % during the spending limits period. In real terms, the expenditure is expected to increase 1 % per year.

### **Observations about the previous spending limits**

The most important change to the spending limits determined a year ago is the cancellation of the regional government, health and social services reform. The previous General Government Fiscal Plan, which covered the period 2019-2022, was based on the assumption that the reform would take effect on 1 January 2020, as laid out in the reform timetable at the time. Under the regional government, health and social services reform, municipal health and social services tasks and a number of other tasks would have been transferred to counties and the county-level operations would have been funded from the Budget. The transfer of the funding responsibility to central government and a tax cut introduced as part of changes in taxation had been taken into account in the previous General Government Fiscal Plan. The impact of the tax cut was estimated at EUR 225 million. On the expenditure side, consideration had been given to the funding of the county-level activities, a number of budget-internal transfers and preparatory funding granted in connection with the reform. The changes in appropriations arising from the planned reform or funding granted for the preparation of the reform are not included in the new General Government Fiscal Plan.

In the technical baseline scenario of the General Government Fiscal Plan, medium-term GDP growth and thus also the rise in tax revenue will be slightly lower than what was estimated a year ago. A lower-than-forecast corporate tax revenue is one factor reducing the overall tax revenue. Moreover, the early repayments of government export credits decided in the first supplementary budget for the year 2018 will reduce the instalments on government-granted loans and the interest income generated by them compared to the estimates made a year ago.

Further improvements in the employment situation will reduce the cyclical central government expenditure compared to the spending limits decision made last spring. At the same time, however, expenditure levels will be boosted by a revised timetable for the HX defence project budget and increases in transport infrastructure investments so that they would remain at the same level as the average of the previous 12-year period. At the same time, there has been a reduction in debt interest payments since the previous spending limits decision, a result of lower interest rates.

**Factors impacting change in central government on-budget balance compared with spring 2018  
General Government Fiscal Plan / Spending Limits Decision, EUR billion**

	2020	2021	2022
Balance projection, General Government Fiscal Plan 2019–2022, 13 April 2018	-1.0	-1.4	-1.5
Revisions to expenditures			
Cancellation of the regional government, health and social services reform	12.6	13.2	13.7
Additional spending on transport infrastructure projects	-0.1	-0.1	-0.1
Change in needs estimates for cyclical central government expenditure	0.2	0.2	0.2
HX-project	0.0	-0.5	-0.5
Additions to Tekes and Academy of Finland authorisations in the 2019 Budget proposal	0.0	-0.1	-0.1
VAT appropriations in individual administrative branches	0.0	0.0	-0.1
Additional compensations for tax revenue losses paid to municipalities as a result of tax cuts (2019 Budget)	-0.2	-0.2	-0.2
Contributions to European Union	0.0	-0.1	-0.1
Debt interest payments	0.2	0.2	0.2
Revision of local government cost allocation	-0.1	-0.1	-0.1
Other changes (net)	-0.2	-0.3	-0.6
Revisions to revenues			
New tax base changes (including the cancellation of the regional government, health and social services reform)	-12.2	-13.0	-13.8
Change in income from miscellaneous revenue and interest, dividends and share trading returns, as well as instalments on loans repaid to the state	-0.3	-0.4	-0.3
Other factors affecting projected revenues (including accrual data and new economic outlook)	-0.5	-0.6	-0.3
Total change	-0.6	-1.7	-2.0
Balance projection, General Government Fiscal Plan 2020-2023 4 April 2019	-1.5	-3.0	-3.4

## Decent growth in the tax revenue

Tax revenue accounts for about 85% of all central government revenue. The taxes on earned income and capital, value added tax and corporate income tax are the most important tax revenue items. In the 2010s, the emphasis of taxation has been shifted from direct taxes towards indirect taxes.

Most of the changes in tax criteria laid out in the Government Programme of Prime Minister Juha Sipilä's Government were introduced between 2016 and 2018. Lower taxes on work, higher excise duties and higher taxes on real estate have been the key measures in this respect. The following changes were introduced at the start of this year: increase in the tax on tobacco products, reduction of car tax and reduction in the deductibility of housing loan interest payments. These are all measures set out in the Government Programme and they will take effect in stages. Furthermore, as laid out in the 2019 Budget, taxes on work were lowered and energy taxes raised as of 1 January 2019. In addition, the earned income and capital income tax forecast assumes that index adjustments will be carried out in the 2020–2022 period to ensure that the tax burden on labour does not increase as a result of higher earnings levels or inflation

**Table 20.** Forecasts for certain revenue and demand items impacting taxable income and the tax base

	2018	2019**	2020**	2021**	2023/2019**
	change, % per year				annual change, %
Taxable earned income and capital income	5.1	3.4	3.4	3.3	3.2
Wage and salary earnings and other income	4.7	4.0	3.7	3.4	3.3
Pensions and other social security benefits	1.0	2.2	2.8	3.2	3.1
Capital income	4.1	3.4	2.9	2.8	2.9
Index of wage and salary earnings	1.8	2.8	3.3	3.1	3.0
Operating surplus	5.8	5.4	4.0	4.8	4.1
Value of household taxable consumption expenditure	2.9	2.5	3.1	3.2	2.8
VAT base	3.1	2.1	2.9	4.5	3.0
Petrol consumption	-1.3	-2.5	-2.0	-2.5	-2.4
Diesel consumption	0.1	0.0	-0.5	-0.5	-0.5
Electricity consumption	2.8	0.0	0.5	0.5	0.4
Duty-paid alcohol consumption	0.9	0.5	1.0	1.0	0.6
New passenger cars	117,900	117,000	119,000	121,000	120,400
Consumer price index	1.1	1.2	1.5	1.7	1.6

Even though economic growth is slowing down, the employment will rise in 2019. There will be further increases in the earned income and capital tax revenue, as the total wage bill is growing. Corporate income tax revenue will also increase this year compared to 2018 because the business operating environment will remain favourable. The slowdown in economic growth will, however, be reflected in slower growth in corporate income tax revenue during the outlook period. The tax at source on interest revenue has been exceptionally low in recent years but with a gradual rise in interest rates, the revenue will also start rising rapidly.

VAT revenue will be boosted by a steady rise in household consumption in the outlook period. However, the revenue from excise duties is expected grow only moderately in overall terms. A reduction in energy tax revenue will be main reason for the fall in the revenue from excise duties and this development is due to a shift from taxable fuel consumption to more lightly taxed biofuels as a result of the biofuel distribution obligation.

In the medium term, the Finnish economy will grow at a rate of slightly less than one per cent and tax bases and consequently also tax revenue will also grow at a slightly slower rate.

Other sources of central government revenue include property income and the transfers from the State Pension Fund. The purpose of the transfers from the State Pension Fund is provide partial funding for central government pension expenditure each year. In the national accounts, Solidium Oy is part of the state sector and for this reason, the payments made by the company to the on-budget entities are not recognised as central government revenue in the accounts. However, the dividends received by Solidium Oy are recognised as central government revenue. Central government property income is expected to remain at about EUR 1.6 billion in the outlook period. The dividend income received by central government have been high and they will increase slightly during 2019. In historical terms, interest income will remain at extremely low levels.



**Table 21. Impact of change in selected tax base items on tax revenue**

Tax category	Tax base	Change	Change in tax revenue, EUR million
Taxes on earned income	Wage and salary earnings	1-pp	427, of which central govt. 127 and local govt. 201
	Pension incomes	1-pp	135, of which central govt. 35 and local govt. 88
Capital income tax	Investment income	1-pp	39
Corporate tax	Operating surplus	1-pp	60, of which central govt. 41 and local govt. 19
VAT	Value of private consumption	1-pp	115
Car tax	Sales of new cars	thousands	6
Energy tax	Electricity consumption <sup>1</sup>	1-pp	9
	Petrol consumption	1-pp	13
	Diesel consumption	1-pp	14
Duty on alcoholic beverages	Alcohol consumption	1-pp	15
Duty on cigarettes	Cigarette consumption	1-pp	11

<sup>1</sup> excl. manufacturing industries, datacenters and greenhouses

**Table 22. Central government on-budget revenue**

	2018	2019**	2020**	2021**	2022**	2023**	2022/2019**
	provisional financial ac- counts	budget incl. supple- mentary budget					annual change, %
	EUR billion						
Total tax revenue estimates	44.4	45.7	46.8	48.4	49.6	50.7	2.7
Income and wealth taxes	14.5	15.2	15.7	16.5	17.1	17.7	3.9
Taxes based on turnover	19.0	19.6	20.2	21.1	21.7	22.3	3.3
Excise duties	7.4	7.5	7.6	7.5	7.4	7.3	-0.6
Other taxes	3.4	3.3	3.3	3.4	3.4	3.4	0.4
Miscellaneous revenue	5.8	5.9	5.7	5.6	5.6	5.7	-0.5
Interest income and profit entered as income	3.0	2.1	1.8	1.8	1.8	1.8	-3.3
Total revenue estimates	54.9	53.7	54.4	56.0	57.2	58.4	2.1

**Table 23. Impact of discretionary tax measures on general government tax revenue**

	2018	2019	2020**	2021**	2022**	2023**
	EUR million					
Earned income taxes	-426	-216	-521	-499	-481	-480
Average increase in municipal tax rate	-38	40	0	0	0	0
Investment income tax	-9	0	0	0	0	0
Corporate tax	5	9	15	-6	0	0
Other direct taxes	-57	-81	2	2	2	2
Value-added tax	-150	-15	-23	0	0	0
Energy taxes	47	35	-1	0	0	0
Other indirect taxes	151	113	3	0	0	0
Social security contributions	-437	-645	625	-448	15	-54

## On-budget accounts and national accounts

As rule, no direct conclusions on the central government budgetary position recognised in the national accounts can be made on the basis of the on-budget budgetary position. On-budget entities posted a deficit of EUR 0.4 billion in 2018. According to the preliminary national accounts figures, central government deficit totalled EUR 2.7 billion. Compared to previous years, the gap between the budgetary positions of on-budget entities and central government was exceptionally wide, more than two billion euros. The timing differences concerning major defence materiel purchases, sales of shares and other financial investments during the outlook period will result in a gap between on-budget entities and national accounts. It is estimated that between 2021 and 2023, the deficit in national accounts will be lower than the on-budget deficit.

Likewise, it is not always possible to make conclusions about the central government borrowing requirement on the basis of the on-budget deficit. In 2018, the net borrowing by the State Treasury was about EUR –0.9 billion or EUR 1.3 billion less than what would have been required by the on-budget deficit. In other words, central government debt declined despite the on-budget deficit. There are several reasons for this difference. Last year's difference was primarily due to deferrable appropriations and the use of liquid assets.

There are several reasons for the difference between the on-budget budgetary position and the central government budgetary position recognised in the national accounts. The most important of them is that in the national accounts, the central government sector is larger than on-budget entities, which basically comprise central government agencies. In the national accounts, the central government sector comprises on-budget entities, government funds (except for the State Pension Fund), universities and their real estate companies as well as the Senate Properties. The decisions on the categorisation of public sector units are regularly reviewed. All central government and general government units are listed on the website of Statistics Finland.

In addition to the classification, differences also arise because the criteria for recognising expenditure in the national accounts and in on-budget entities differ from each other. The national accounts are accrual-based whereas the on-budget entities are partially cash-based. Because of the differences in recognition criteria, deferrable appropriations in particular cause a difference between on-budget and nation-

al accounts expenditure. Deferrable appropriations are multi-year appropriations that are entered in the Budget for one year only. In the national accounts, deferrable appropriations are recognised on accrual basis in accordance with their year of use (as all other expenditure). There can be substantial variation in the net effect of deferrable appropriations from one year to another. In the national accounts, taxes, subsidies and EU contributions are converted into accrual-based items by means of timing adjustments. The difference arising from the timing adjustments can only be determined afterwards.

Such financial investments as loans granted and repaid by the state and sales and acquisitions of shares that in the national accounts are primarily treated as financial transactions are also included as revenue and expenditure in the on-budget budgetary position. The financial transactions do not have any effect on the central government budgetary position as defined in the national accounts. The financial transactions also include the derivatives using which the State Treasury has achieved significant reductions in on-budget interest payments. The fact that derivative contracts reduce interest payments is not considered in the national accounts, which means that the interest expenditure recognised in the national accounts is substantially higher than the on-budget interest payments. Last year, central government received substantial revenue from the sales of shares and loan repayments, which narrowed the on-budget deficit but not the deficit recognised in the national accounts.

EU Member States report to Eurostat twice a year on the differences between the figures in on-budget entities and the national accounts as part of their deficit and debt reporting. Detailed explanations should be given for the differences between the final accounts budgetary position for central government and other general government subsectors and national accounts net lending in the preceding years. Debt dynamics (the uniformity of the change in general government net lending and public debt) must also be detailed in the reporting.

**Table 24. On-budget balance and central government net lending<sup>1</sup>**

	2017	2018	2019**	2020**	2021**
	EUR billion				
<b>On-budget surplus (+) / deficit (-)<sup>2</sup></b>	<b>-3.7</b>	<b>-0.4</b>	<b>-1.8</b>	<b>-1.5</b>	<b>-3.0</b>
Privatization proceeds (net proceeds from equity sales)	0.0	-1.1	-0.3	-0.2	-0.2
Financial investment, net	-0.9	-2.1	-0.2	-0.2	-0.2
Revenue surplus in off-budget units	-0.2	-0.1	-0.1	-0.1	-0.1
Cash / accrual basis adjustment	0.5	0.5	0.4	0.2	1.7
Other adjustment items <sup>3</sup>	0.2	0.3	0.1	0.1	0.1
<b>Central government net lending (+) / borrowing (-)</b>	<b>-4.1</b>	<b>-2.7</b>	<b>-1.8</b>	<b>-1.8</b>	<b>-1.7</b>

1) In National Accounts terms

2) Incl. government debt servicing

3) Incl. debt cancellations, profit on reinvested foreign direct investments, impact of the difference in the recording of deferrable budgetary appropriations, superdividends

## 2.3 Local government

With only a slight increase in revenue and a rapid increase in expenditure, there was a substantial weakening in the state of local government finances in 2018. According to the preliminary national accounts figures, the deficit in the local government budgetary position was 0.8% of GDP last year. Increases in local government revenue were slowed down by a decrease in municipal tax revenue, a result of exceptionally high prepaid tax refunds and the downward adjustment of municipalities' apportionment. Consumption expenditure increased at a rapid rate, a result of the growth in age-related care and nursing expenditure, reduction of daycare fees, preparation of the regional government, health and social services reform and rising earnings in the local government sector. Boosted by construction and infrastructure investments, there was also a rapid increase in investment expenditure.

The local government deficit will remain at last year's levels in 2019. In 2019, the expenditure will be boosted by growing health and social service needs, as well as by municipal-sector pay rises and the expiry of the holiday bonus cut under the Competitiveness Pact, which will already have its largest impact in 2019. There will also be further increases in investment expenditure as the construction of schools and hospitals will continue and infrastructure investments will remain at high level. Local government revenue will grow steadily during 2019 as tax revenue growth picks up. Municipalities' tax revenue growth will be boosted by a steady growth in earned

income, the one-off tax revenue increase resulting from the bringing forward of back tax payments and the 0.04 percentage point rise in the average municipal tax rate (to 19.88%). There will be a reduction in government transfers and grants in 2019 due to such factors as the revision of the division of costs between central and local government. In accordance with the Government Programme of Prime Minister Juha Sipilä's Government, no index adjustment will be made to central government transfers to municipalities in 2019 either.

The growth pressures on local government consumption expenditure result from the ageing of the population, which will increase care and nursing expenditure. Because of the cancellation of the regional government, health and social services reform, local government sector will be facing expenditure pressures throughout the outlook period. The population projection published by Statistics Finland in November 2018 has been taken into account in the need for more services. At the level of local government as a whole, the pressures to increase spending are eased by a reduced need for educational services, a result of falling birth rates and smaller age classes. The savings potential generated by a reduced need for educational services can only be realised if the number of daycare centres, schools and early childhood education and teaching personnel is adjusted in accordance with the rapidly shrinking number of children. However, the impacts of the reduced need for educational services has been revised slightly in the estimates because the need to reduce the number of daycare centres and schools is expected to be realised more slowly than estimated. Rising employment rates will also increase the number of children in early childhood education.

There will be a slight improvement in the local government budgetary position in 2020. Government transfers and grants in particular are expected to increase substantially as municipalities will receive a compensation of about EUR 240 million for the holiday bonus cut laid out in the Competitiveness Pact so that the cut would not be taken into account twice in central government transfers to local government. Government transfers and grants will also be increased by the partial elimination of the cuts laid out in the Competitiveness Pact and the index increase in central government transfers to local government. At the same time, local government expenditure is also expected to increase as the tight labour market is likely to boost earnings.

**Table 25. Local government<sup>1</sup>**

	2016	2017	2018	2019**	2020**	2021**
	EUR billion					
Taxes and social security contributions	22.0	22.8	22.5	23.9	24.6	25.6
of which municipal tax	18.7	19.1	18.8	20.1	20.7	21.5
corporate tax	1.5	1.9	1.9	2.0	2.0	2.1
real estate tax	1.7	1.8	1.8	1.9	1.9	1.9
Other revenue <sup>2</sup>	18.9	18.8	19.3	19.5	20.8	21.2
of which interest receipts	0.3	0.3	0.3	0.3	0.3	0.3
transfers from central government	14.3	13.9	14.3	14.2	15.3	15.5
<b>Total revenue</b>	<b>40.9</b>	<b>41.6</b>	<b>41.8</b>	<b>43.4</b>	<b>45.4</b>	<b>46.8</b>
Consumption expenditure	34.0	34.4	35.7	36.8	38.3	39.7
of which compensation of employees	21.6	21.0	21.5	21.9	22.6	23.2
Income transfers	3.3	2.7	2.7	2.7	2.7	2.8
of which social security benefits and allowances	1.4	0.7	0.8	0.8	0.8	0.8
subsidies and other transfers	1.8	1.9	1.8	1.8	1.8	1.8
interest expenses	0.1	0.1	0.1	0.1	0.2	0.2
Capital expenditure <sup>3</sup>	4.5	4.9	5.2	5.7	5.9	5.9
<b>Total expenditure</b>	<b>41.8</b>	<b>42.0</b>	<b>43.6</b>	<b>45.2</b>	<b>46.9</b>	<b>48.4</b>
<b>Net lending (+) / net borrowing (-)</b>	<b>-0.9</b>	<b>-0.4</b>	<b>-1.8</b>	<b>-1.8</b>	<b>-1.5</b>	<b>-1.7</b>
Primary balance <sup>4</sup>	-1.0	-0.5	-2.0	-1.9	-1.5	-1.7

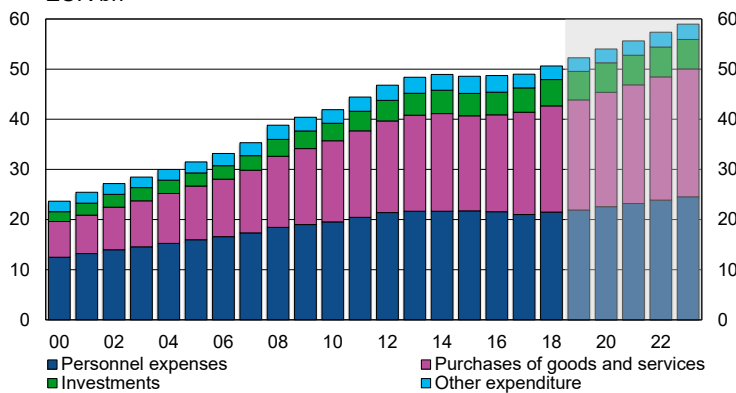
1) As calculated in National Accounts

2) Incl. capital transfers and consumption of fixed capital

3) Gross capital formation and capital transfers

4) Net lending before net interest expenses

### Local government expenditure EUR bn

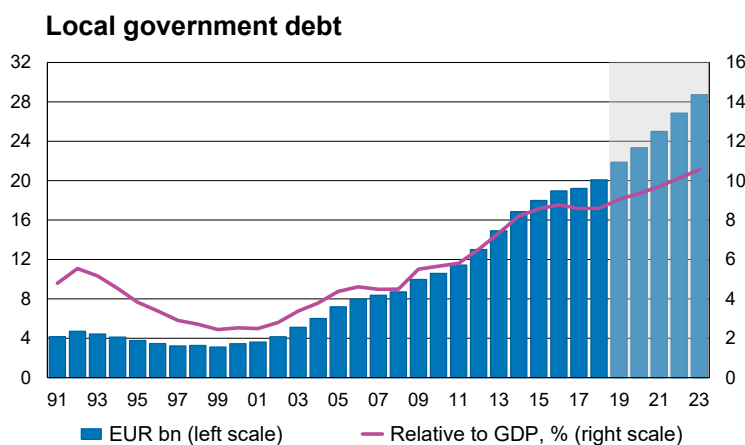


Sources: Statistics Finland, MoF

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Local government will also post substantial deficits in the period 2021-2023. Wage bill growth will ensure a steady increase in tax revenue. Central government transfers will also be boosted by compensations for lost tax revenue paid to municipalities and index increases. However, a steady growth in revenue will not be enough to improve the state of local government finances as investments will remain at a high level and the ageing population will need more health and social services.

Local government debt-to-GDP ratio decreased in 2017 and remained at more or less unchanged in 2018. However, the debt ratio will start rising again this year and the rate of growth will be rapid throughout the outlook period, a result of local government deficits and a slowdown in economic growth.



Sources: Statistics Finland, MoF

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## Local government accounting and national accounts: how they differ

The closest local government accounting equivalent to the national accounts concept of net lending is the cash flow from operations and investments (financial position). The two accounting systems define sector boundaries differently, and the same goes for the timing of concepts and entries. The reasons for the differences between the cash flow from operations and investments in local government accounting and net lending in the national accounts are examined in the table below (Table 26).

The most important conceptual difference stems from sector definitions. Local government accounting is concerned with municipalities, joint municipal authorities

and their commercial institutions, and excludes municipal operations conducted by an independent legal entity, for example in the form of a limited liability company. The definition of the local government sector in the national accounts, on the other hand, does include enterprises owned by municipalities, mainly treating them as units serving their parent entity.

The local government sector is understood in the national accounts to comprise the non-market operations of local and joint municipal authorities, which are primarily financed from tax revenues and compulsory payments. Public corporations that primarily finance their operations through sales revenue from other sectors, such as water, waste and energy management, and port activities, are therefore classified in the national accounts in the corporations sector, outside the local government sector.

The concept of an investment expenditure differs in local government accounting and national accounts. Acquisitions and sales of shares and equities are recorded in the national accounts as financial transactions and not under local government investment expenditure. Local government accounting, on the other hand, record share acquisitions as investments in fixed assets.

There are also differences in the concepts of property expenditure and incomes. In the national accounts, changes in the value of assets and liabilities are not included in income or expenditure, so the other financing revenue and costs of municipalities and joint municipal authorities (excluding dividends and interest) are not included in the national accounts definition of net lending.

There are also differences in the timing of entries in local government accounting and in the national accounts. In local governments' accounts, tax revenue describes the amount of tax collected during the calendar year. In the national accounts, tax revenue for the year in question is based on the tax authorities' accounts of tax remittance from February through to the end of January the following year. This is intended to take into account the timing difference between advance tax payments and remittance to government.



**Table 26. Financial position in local government accounting and local government net lending**

	2017	2018	2019**	2020**	2021**
	EUR billion				
<b>Cash flow from municipalities' and joint municipal authorities' operations and investments</b>	<b>0.1</b>	<b>-1.5</b>	<b>-1.5</b>	<b>-1.2</b>	<b>-1.5</b>
Other than municipalities' and joint municipal authorities' net lending effect <sup>1</sup>	-0.4	-0.4	-0.4	-0.4	-0.4
Effect of municipalities' and joint municipal authorities' operations outside the local government sector	-0.1	0.1	0.1	0.1	0.1
Acquisitions and sales of shares	0.1	0.0	0.0	0.0	0.0
Differences in concepts of property expenditure and income	-0.1	-0.0	-0.1	-0.1	-0.1
Timing differences	0.0	-0.1	-0.0	-0.1	-0.1
Other differences <sup>2</sup>	-0.0	0.1	0.1	0.2	0.2
<b>Local government net lending (+) / borrowing (-)</b>	<b>-0.4</b>	<b>-1.8</b>	<b>-1.8</b>	<b>-1.5</b>	<b>-1.7</b>

1) Corporations classified under local government but not included in statistics on municipal finances as well as Government of Åland, Association of Finnish Local and Regional Authorities, Local Government Employers and Municipal Guarantee Board

2) E.g. differences in capital transfers and investment grants

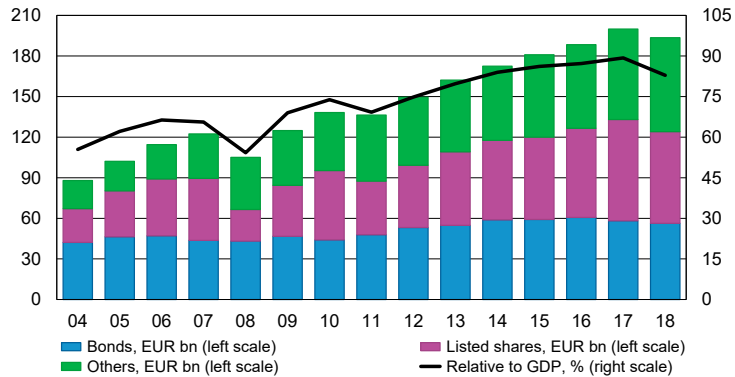
## 2.4 Social security funds

### 2.4.1 Employment pension schemes

Employment pension schemes were able to increase their surplus to 1.1% of GDP in 2018. This was due to substantial increases in property income and especially in dividend income. Furthermore, a better employment situation led to large increases in pension contribution income. However, there has been a substantial reduction in the surplus of the employment pension schemes over the past decade because in the first decade of the 2000s, the average surplus stood at more than three per cent. An increase in the number of pensioners and the rise in average pensions are the main reasons for the development. Low interest rates have also caused a decline in the property income of the employment pension schemes. Despite this, a rise in asset prices (which has been mainly driven by rising share prices) has increased the value of the pension assets to almost EUR 200 billion.

The surplus of the employment pension schemes is expected to remain more or less at 2018 levels throughout the outlook period. Employment pension expenditure will continue to increase at a rate of four per cent during the outlook period. Even though the growth in the number of pensioners will gradually slow down, pension expenditure will be boosted by increases in average pensions and annual index increases. At the same time, a rapid rise in the wage bill will generate more pension contribution income. As interest rates are rising, property income of employment pension institutions is also expected to increase further at a moderate level. The assumption has been that the private-sector pension contribution will remain at its current level (24.4%) throughout the outlook period. According to the most recent long-term projections published by the Finnish Centre for Pensions in March 2019, there will slight pressures to increase these contributions after the outlook period.

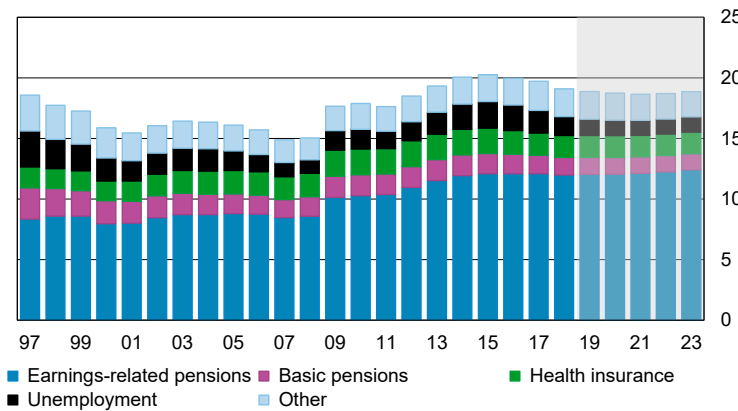
### Investment portfolio of pension funds all members



Sources: The Finnish Pension Alliance TELA, Statistics Finland, MoF

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### Benefits, allowances and medical care reimbursements relative to GDP, %



**Table 27. Finances of social security funds<sup>1</sup>**

	2016	2017	2018	2019**	2020**	2021**
	EUR billion					
Investment income	3.5	3.7	4.3	4.5	4.8	5.2
Social security contributions	27.9	27.3	28.0	28.4	30.1	30.7
of which contributions paid by employers	18.8	17.6	17.8	17.8	18.6	19.1
contributions paid by insured	9.2	9.7	10.2	10.6	11.5	11.6
Transfer from general government	14.6	15.8	15.5	15.5	14.9	15.2
Other revenue	0.5	0.4	0.4	0.4	0.4	0.4
<b>Total revenue</b>	<b>46.5</b>	<b>47.2</b>	<b>48.2</b>	<b>48.8</b>	<b>50.3</b>	<b>51.4</b>
Consumption expenditure	3.6	3.6	3.7	3.9	4.0	4.0
Social security benefits and allowances	36.6	37.6	37.9	38.7	39.7	40.8
Other outlays	3.4	3.4	3.3	3.3	3.4	3.4
<b>Total expenditure</b>	<b>43.6</b>	<b>44.5</b>	<b>45.0</b>	<b>45.9</b>	<b>47.0</b>	<b>48.3</b>
<b>Net lending (+) / net borrowing (-)</b>	<b>2.9</b>	<b>2.7</b>	<b>3.2</b>	<b>2.9</b>	<b>3.2</b>	<b>3.2</b>
Earnings-related pension schemes	2.4	2.0	2.5	2.5	2.8	2.9
Other social security funds	0.5	0.7	0.7	0.4	0.4	0.2
Primary balance <sup>2</sup>	1.6	1.5	1.8	1.4	1.6	1.5

1) As calculated in National Accounts

2) Net lending before net interest expenses

## 2.4.2 Other social security funds

The other social security funds are the Social Insurance Institution of Finland, which is primarily responsible for basic security, and the Employment Fund, which is responsible for earnings-related unemployment security. The surplus of the other social security funds remained at 0.3% of GDP in 2018. The surplus is due to the one-percentage-point increase in the unemployment insurance contribution at the start of 2016 and a substantial reduction in unemployment security expenditure, a result of an improved employment situation.

A gradual reduction in the surplus of the other social security funds is expected in the outlook period. This is because against the background of a substantial surplus in the Employment Fund arising from the economic upturn, the unemployment insurance contribution was lowered by 0.8 percentage points at the start of 2019. Improvements in the employment situation will continue to reduce unemployment

expenditure in the coming years and the rising wage bill will boost social security contribution income. Expenditure growth in 2019 will also be slowed down by the decision under which the benefits tied to the national pension index (except for the basic social assistance) will not be raised this year.

In the light of the forecast, the cyclical buffer of the Employment Fund will accumulate funds at such a rate that under the current legislation, there should be further reductions in the unemployment insurance contribution in 2020 or in 2021 at the latest. Thus, the assumption is that the unemployment insurance contribution would be cut by additional 0.4 percentage points from 2021. For reasons of caution, the size of the reduction has been estimated so that the cyclical buffer of the Employment Fund will be accumulated by the year 2023 even if the reduction was already introduced in 2020 and there was an increase in unemployment.

**Table 28. Social security contributions rates and pension indices**

	2016	2017	2018	2019**	2020**	2021**
<b>Social insurance contributions<sup>1</sup></b>						
<b>Employers</b>						
Sickness insurance	2.12	1.08	0.86	0.77	1.35	1.36
Unemployment insurance	2.85	2.41	1.91	1.50	1.50	1.31
Earnings-related pension insurance	18.00	17.95	17.75	17.35	16.95	16.95
Local government pension insurance	23.21	21.95	21.60	21.20	20.80	20.80
<b>Employees</b>						
Sickness insurance	2.12	1.58	1.53	1.54	1.82	1.70
Unemployment insurance	1.15	1.60	1.90	1.50	1.50	1.30
Earnings-related pension insurance	6.00	6.45	6.65	7.05	7.45	7.45
<b>Benefit recipients</b>						
Sickness insurance	1.47	1.45	1.53	1.61	1.63	1.50
<b>Pension indices</b>						
Earnings-related index (over 65)	2519	2534	2548	2585	2622	2673
National pension index	1631	1617	1617	1617	1635	1661

1) Annual averages. The contributions of employers and the unemployment and employment pension contributions of beneficiaries as percentages of wages and salaries. The figures are weighted averages.

## 2.5 Long-term sustainability of public finances

Even though the general government debt-to-GDP ratio is expected to decline further in the next few years, the ageing of the population is creating significant pressures to long-term sustainability of public finances. General government finances are also facing pressures arising from climate change, planned defence materiel purchases and infrastructure projects as well as the maintenance backlog in public infrastructure.

An increase in the ageing population will mean higher pension, health care and long-term care expenditure, for which the current total tax rate will be insufficient in the future. Furthermore, the working-age population, which is financing Finland's welfare services and social security through taxes, is shrinking. These phenomena are illustrated in the figures below. A permanent imbalance between revenue and expenditure (sustainability gap) is threatening to increase Finland's indebtedness to unmanageable levels in the long run.

The Ministry of Finance estimates that the sustainability gap is about four per cent of GDP. The medium-term estimate of public finances has led to a slight increase in the estimated sustainability gap, compared to the figures published in December. At the same time, the estimates for long-term employment trends have been revised, which has led to a slightly lower sustainability gap estimate.

The Ministry of Finance's estimate of the long-term sustainability of general government finances is based on the methods and calculation principles jointly agreed in the EU. The sustainability calculation is a pressure projection in which the trends under current legislation and practices are projected to the future with the help of population projections, spending breakdowns by age groups, and estimates of long-term economic growth trends. Only the decisions whose impacts on public finances can be estimated with sufficient certainty are considered in the sustainability gap estimate. The calculation methods are detailed in the description of the methods used by the Ministry of Finance in the sustainability gap calculations.<sup>1</sup>

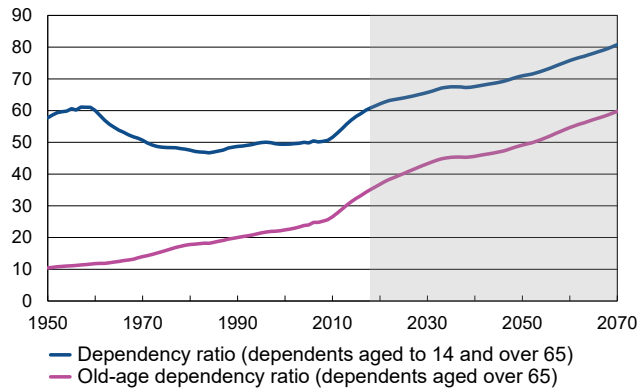
Significant uncertainty is associated within the sustainability gap estimate, and it is sensitive to the assumptions used about future development. For this reason, the

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1 <https://vm.fi/en/descriptions-of-methods>

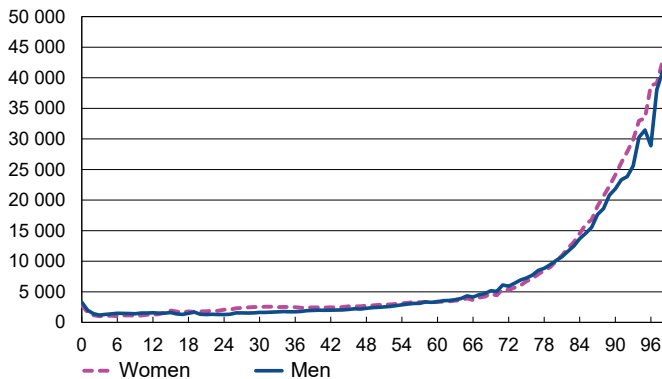
sensitivity of the sustainability gap calculation to different calculation assumptions is examined in more detail in the table below. Despite the uncertainty, the calculation provides a coherent way of examining the challenges facing public finances and means to overcome them.

### Dependency ratio and old-age dependency ratio dependents per 100 persons of working age



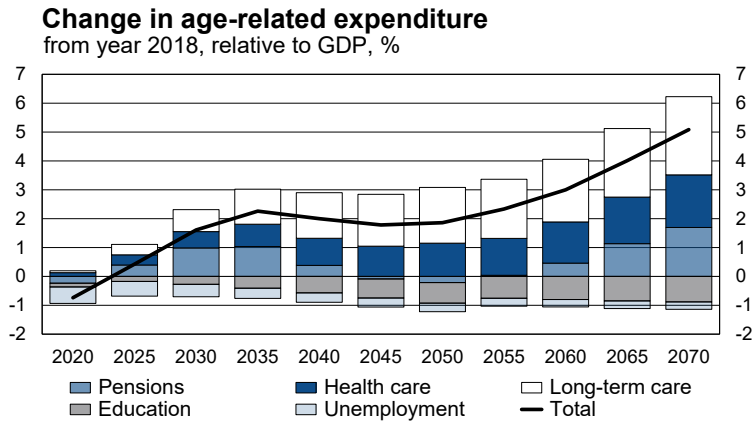
Source: Statistics Finland

### Health expenditure by age and gender 2011 EUR per inhabitant\*



\* Includes long-term care

Sources: The National Institute for Health and Welfare, Statistics Finland



The figure is compiled using the model developed by the Ministry of Social Affairs and Health for social expenditure analysis

Source: MoF

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**Table 29. General government finances 2018–2070, % of GDP**

	2018	2023**	2030**	2040**	2050**	2060**	2070**	2070/2018**
	relative to GDP, %							change, %
Total expenditure	53.1	52.5	55.3	57.1	58.3	61.2	65.6	12.5
of which age-related and unemployment expenditure	29.2	29.9	31.5	31.9	31.8	32.9	35.0	5.8
Pensions	13.3	13.8	14.7	14.1	13.5	14.1	15.4	2.1
Old-age pensions	12.2	12.8	13.7	13.1	12.5	13.0	14.2	2.0
Other pensions	1.1	1.0	1.0	1.0	1.0	1.1	1.2	0.1
Health care	6.0	6.2	6.5	6.9	7.1	7.4	7.8	1.8
Long-term care	2.2	2.5	3.0	3.8	4.2	4.4	5.0	2.7
Education	5.6	5.5	5.4	5.1	4.9	4.8	4.8	-0.8
Unemployment	2.0	1.9	2.0	2.1	2.1	2.1	2.1	0.1
Interest expenditure	0.9	1.0	2.1	3.6	4.9	6.6	8.9	8.1
Total revenue	52.5	51.9	52.4	52.7	53.2	54.0	54.4	1.9
of which: property income	2.9	3.1	3.5	3.9	4.4	5.1	5.6	2.7
Net lending <sup>1</sup>	-0.6	-0.6	-2.9	-4.4	-5.1	-7.3	-11.2	-10.6
of which: transfer to pension funds	1.1	1.1	0.5	1.5	2.7	2.9	2.2	1.2
General government debt	58.9	58.3	65.4	91.0	125.3	169.5	227.6	168.7
General government assets, consolidated	124.3	124.8	124.5	124.0	132.4	144.9	152.6	28.3
Pension funds' financial assets, consolidated	83.6	84.1	85.5	87.8	99.0	113.0	121.3	37.8

1) Cyclically-adjusted net lending as of 2030



**Table 30. Underlying assumptions**

	Assumptions, %					
	2023**	2030**	2040**	2050**	2060**	2070**
Labour productivity growth	1.1	1.0	1.4	1.5	1.5	1.5
Real GDP growth	0.7	0.6	1.3	1.3	1.3	1.2
Participation rate						
Males (15–64)	79.6	78.6	78.6	79.1	79.8	80.6
Females (15–64)	77.1	75.9	76.0	76.6	77.3	77.8
Total (15–64)	78.5	77.3	77.3	77.9	78.6	79.2
Unemployment rate	6.1	7.1	7.4	7.6	7.9	7.8
Old-age dependency ratio <sup>1</sup>	38.3	43.3	45.6	49.2	54.7	59.8
Inflation	1.8	2.0	2.0	2.0	2.0	2.0
Real interest rate	-0.2	1.2	2.0	2.0	2.0	2.0
Real return of pension assets	2.4	3.1	3.5	3.5	3.5	3.5

1) The ratio of people aged over 64 to those aged 15–64

**Table 31. Impact of various factors on the sustainability gap**

	Baseline scenario (spring 2019)	Change	Impact on sustainability gap <sup>1</sup> , pp.
Growth in general productivity (and real earnings)	on average 1.4%	+0.5 pp.	-0.5
Employment rate (from the late 2020s onwards)	73.3% in 2023 and 73.4% in 2070	+1.0 pp.	-0.4
Annual productivity growth of public health and social services	0%	+0.5 pp.	-1.8
General government structural primary balance <sup>2</sup> / GDP in 2023	0.2%	+1.0 pp.	-1.0
Total fertility rate	1.45	+0.25 (= 1.70)	-0.3
Annual net immigration (impact if employment rate remains unchanged)	15,000	+7,500 (= 22,500)	-0.5
Life expectancy at the age of 50 (33.6 years in 2019)	Will be increased by 6.9 years by 2070	-1.4 years (= 5.5 years)	-0.7
Postponement of the need for health and social services as life expectancy increases	Will be postponed by half of the life expectancy increase (people aged over 50)	Will be postponed at the rate of life expec- tancy increase	-1.3
		No postpone- ment as life expectancy inc- reases	+1.4
Inflation (change in GDP deflator and consumer prices)	2%	-0.5 pp.	approx. 0.0
Real interest rate on central and local government debt (+ impact on the discount rates of the two sectors)	Real interest rate on central and local government debt	-0.5 pp.	approx. 0.0
Real interest rate on central and local government debt and impact on the real rate of return on central and local government and employment pension schemes' investments in bonds (+ impact on all sectors' discount rates)	and interest income 2%, real rate of return on central and local government's in- vestments in shares 4% and real rate of return on emp- loyment pension schemes'	-0.5 pp.	+0.2
Real interest rate on central and local government debt and real rate of return on all general government investments (+ impact on all sectors' discount rates)	investments 3.5% (from 2030s onwards)	-0.5 pp.	+0.7

1) The calculations are based on december 2018 MoF sustainability gap calculations (impact of assumption changes are stable over different calculation rounds)

2) Deficit excl. interest expenditure

## Appendix

### Supplementary statistics

1. Evolution of forecasts over time
2. Outturn data and forecasts used in budget process for 2014-2018, average change, %
3. National balance of supply and demand
4. Financial balance of the Finnish economy

**Table 1. Evolution of forecasts over time<sup>1</sup>**

	2018				2019**				2020**				2021**			
	summer18	autumn18	winter18	outcome	spring19	summer18	autumn18	winter18	spring19	summer18	autumn18	winter18	spring19	summer18	autumn18	winter18
GDP at market prices, change in volume, %	2.9	3.0	2.5	2.3	1.7	1.8	1.7	1.5	1.4	1.7	1.6	1.3	1.2			1.1
Consumption, change in volume, %	1.6	1.6	1.1	1.4	1.3	1.2	1.3	1.2	1.3	1.2	1.1	1.1	1.2			1.1
Exports, change in volume, %	4.9	4.9	3.5	1.5	3.2	4.0	3.9	3.1	2.9	3.2	3.2	2.6	2.0			2.4
Unemployment rate, %	8.0	7.4	7.5	7.4	6.3	7.5	6.9	6.9	6.1	7.0	6.6	6.7	6.0			6.6
Consumer price index, change, %	1.1	1.1	1.2	1.1	1.2	1.4	1.4	1.4	1.5	1.6	1.6	1.6	1.7			1.7
Central government net lending, relative to GDP, %	-1.7	-1.5	-1.3	-1.2	-0.7	-0.9	-0.7	-0.7	-0.7	-0.6	-0.7	-0.7	-0.7			-0.3
General government net lending, relative to GDP, %	-0.7	-0.7	-0.8	-0.6	-0.3	-0.3	-0.1	-0.4	0.0	-0.1	0.2	-0.1	-0.1			-0.1
Central government debt, relative to GDP, %	46.3	46.0	45.0	44.9	44.2	45.8	45.3	44.5	43.4	45.0	44.3	43.8	43.3			43.8

<sup>1</sup> Economic Survey

Sources: Statistics Finland, MoF

**Table 2. Outturn data and forecasts used in budget process for 2014-2018**

	Years 2014-2018		Average forecast errors	
	Forecast averages, % ch.	Outcome averages, % ch.	Forecast under-/over-estimation <sup>1</sup> , pp.	Magnitude of forecast error <sup>2</sup> , pp.
GDP (volume)	1.3	0.7	0.6	1.5
GDP (value)	3.0	2.1	0.9	1.5
Private consumption (value)	2.5	2.2	0.3	0.9
Current account, % of GDP	-0.6	-0.5	-0.1	0.7
Inflation	1.8	0.7	1.1	1.1
Wage bill	1.9	1.1	0.8	1.3
Unemployment rate	8.5	8.7	-0.2	0.5
Central government debt, % of GDP	48.9	46.7	2.2	2.2
Central government net lending, % of GDP	-2.8	-3.0	0.2	0.7
General government net lending, % of GDP	-2.0	-2.2	0.1	1.3

Forecasts are compared with March/July preliminary national accounts data.

Averages for the past five years are calculated on the basis of spring and autumn forecasts concerning the budget year.

<sup>1</sup> Over- or underestimation is indicated by average forecast error.

<sup>2</sup> The average of absolute error values indicates the average magnitude of forecast errors, regardless of the direction of error.

**Table 3. National balance of supply and demand, EUR million**

	Current prices					
	2016	2017	2018	2019**	2020**	2021**
GDP at market prices	216 073	223 892	233 555	241 680	249 768	257 609
Imports of goods and services	79 736	85 577	92 329	97 174	101 913	105 696
<b>Total supply</b>	<b>295 809</b>	<b>309 469</b>	<b>325 884</b>	<b>338 854</b>	<b>351 681</b>	<b>363 305</b>
Exports of goods and services	77 500	86 228	91 005	96 128	101 007	104 974
Consumption	170 549	172 992	177 888	183 371	189 567	195 945
private	119 003	121 513	124 844	128 843	133 012	137 574
public	51 546	51 479	53 044	54 528	56 555	58 371
Investment	46 844	49 591	52 603	53 858	55 252	56 492
private	37 994	40 434	42 880	43 862	45 319	46 582
public	8 850	9 157	9 723	9 996	9 933	9 911
<b>Total demand</b>	<b>295 704</b>	<b>309 880</b>	<b>324 150</b>	<b>337 120</b>	<b>349 947</b>	<b>361 571</b>
	At reference year 2010 prices; not additive					
	2016	2017	2018	2019**	2020**	2021**
GDP at market prices	192 683	197 794	202 401	205 874	208 678	211 105
Imports of goods and services	80 986	84 026	87 580	89 946	92 173	93 921
<b>Total supply</b>	<b>265 723</b>	<b>273 560</b>	<b>281 369</b>	<b>286 983</b>	<b>291 808</b>	<b>295 822</b>
Exports of goods and services	76 674	82 564	83 811	86 527	89 041	90 825
Consumption	153 096	154 500	156 678	158 752	160 772	162 781
private	107 072	108 658	110 192	112 168	113 965	115 828
public	46 032	45 855	46 499	46 601	46 831	46 991
Investment	42 321	44 145	45 573	45 802	46 187	46 457
private	34 344	35 978	37 159	37 296	37 923	38 393
public	7 974	8 165	8 411	8 503	8 260	8 062
<b>Total demand</b>	<b>272 889</b>	<b>281 914</b>	<b>287 622</b>	<b>293 025</b>	<b>297 617</b>	<b>301 378</b>

**Table 4. Financial balance of the Finnish economy**

	2014	2015	2016	2017	2018
	relative to GDP, %				
<b>Gross investment</b>	<b>20.6</b>	<b>20.3</b>	<b>21.7</b>	<b>22.1</b>	<b>22.5</b>
households and non-profit institutions	5.9	5.7	6.3	6.5	6.9
non-financial corporations and financial and insurance corporations	10.5	10.8	11.3	11.5	11.5
general government	4.2	3.9	4.1	4.1	4.2
<b>Gross saving<sup>1</sup></b>	<b>19.7</b>	<b>20.2</b>	<b>21.3</b>	<b>22.2</b>	<b>22.6</b>
households and non-profit institutions	4.2	3.9	3.4	3.1	4.0
non-financial corporations and financial and insurance corporations	14.5	15.3	15.7	15.9	15.1
general government	1.0	1.1	2.2	3.2	3.5
<b>Financial surplus</b>	<b>-1.2</b>	<b>-0.6</b>	<b>-0.8</b>	<b>-0.2</b>	<b>-1.8</b>
households and non-profit institutions	-1.9	-2.0	-3.2	-3.6	-3.1
non-financial corporations and financial and insurance corporations	3.9	4.1	4.2	4.0	2.6
general government	-3.2	-2.8	-1.7	-0.8	-0.6
Statistical discrepancy	0.0	0.0	0.0	-0.2	0.7

<sup>1</sup> Incl. capital transfers (net)



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